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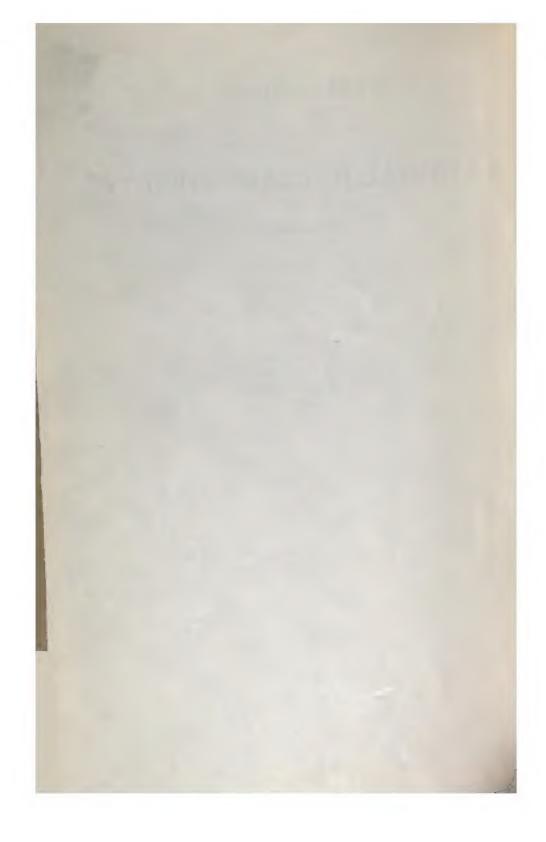
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NATIONAL HERBART SOCIETY

1895-1900

EDITED BY
CHARLES A. McMURRY
SECRETARY OF THE SOCIETY

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THE FIRST

YEAR BOOK

OF THE

HERBART SOCIETY

FOR THE SCIENTIFIC STUDY OF TEACHING. PREPARED FOR DISCUSSION AT THE

DENVER MEETING

OF THE

NATIONAL EDUCATIONAL ASSOCIATION,

BUSTRU BY

CHARLES A. MCMURRY Secretary of the Society.

one for the Discussion of these Papers occur Wednesday, July 10, at 2:30 P.M.

E PAPERS WILL BE DISCUSSED, NOT READ AT THE MEETINGS.



PREFACE.

The papers included in this first Year Book of the Herbart Society for the Scientific Study of Teaching, bring to a fuller treatment two of the questions that have already attracted the serious attention of teachers, and in the future are likely still more to call for thoughtful study and tests.

The problem of Concentration involves the whole school course in its influence upon child character, and treats the selection and arrangement of topics in the studies and the method of instruction that will establish the relations needed.

The Culture Epochs' theory raises one of the most interesting and profound problems in education and one, too, whose practical effects are quickly seen and felt.

The introduction gives a graphic account of the problems pressing for solution today, and touches in a lively way the questions which are more fully discussed in the other papers.

The course of study for first and second grades illustrates an attempt to select and arrange the materials of instruction, paying heed to the requirements of concentration.

Those interested in these papers will do well to read them carefully before going to Denver. The papers will not be read at the meeting, but the full time given to discussion. Those wishing to purchase copies at 50 apply to the secretary.

CHARLES A. McMurry,
Normal, Il

MOST PRESSING PROBLEMS

CONCERNING THE ELEMENTARY COURSE OF STUDY.

PRESIDENT CHARLES DEGARMO, OF SWARTHMORE COLLEGE.

INTRODUCTORY REMARKS.

enough to do in the effort to extend the benefits of education to all the people. Public opinion for universal education had to be developed and formulated into laws. The establishment and perfection of the external machinery for such a system was a work of great magnitude. Houses and implements were to be provided; teachers were to be certificated and paid, and to some extent trained for their specific duties.

It is no small task to universalize an idea that affects all the people, especially when that idea is an initial effort of a great nation to determine its welfare and even destiny from within. In all ages men have been governed, for the most part, however, from forces that did not represent their own outflowing thought. But now we have undertaken to determine from the heart of the people, not only our destiny, but also the methods and means whereby we propose to work it out. The greatest agency for this self-evolution of a people is universal education.

Having undertaken, therefore, for the first time in history, this vast enterprise, it is not to be wondered at that our chief efforts in the past have been directed mostly to the perfection of the external machinery necessary for its successful prosecution.

When this pioneer work for the race was being inaugurated, it chanced that it'was undertaken by a nation that was still essentially in its pioneer stages of development.

We began with the primitive ideas of education that were developed when there were few things to study and but few people to study them. Learning had been confined for the most part to languages, logic, and philosophy, and learners had been restricted to literati, gentlemen, clergymen, and a few professionals. But now a double difficulty confronts us-vast increase in available knowledge and multiplication of learners. Knowledge has been advanced so rapidly, enriched so immensely, and extended in so many directions, that he who still adheres to the ancient course of study, whose strength was its poverty, does so against many urgent protests arising from this growth in knowledge and this extension of education to all children of all classes of men. It is found that the mental food so palatable to gentlemen and literati, and so valuable for professionals, has proved to be neither palatable nor valuable to many of the sons of toil, to whom educational traditions are like mythological tales-good enough for idle hours, but of small account in the modern struggle for ex istence.

One of the problems that has already forced itself upon us, is, therefore, What shall the public school teach? That this problem is already being vigorously attacked, witness the efforts of New England to shorten and enrich the grammar school curriculum, the report of the committee of ten, and the report of the committee of fifteen on elementary education, presented last February before the Department of Superintendence at Cleveland.

Many and various are the schemes for solving the problem. Some would rigorously exclude all the new and cling desperately to the old. Others would discard the old and cling to the new. This is what Prof. Stoy used to call surgical pedagogy. To reduce weight it amputates limbs. Some advocate the application of the elective system of the university to the elementary and secondary schools. If there is such a wealth of good material, why not let the child choose what he fancies? To such a course many serious objections might be urged. The idea of election in lower schools is apparently based on the doctrine that study of any kind has a disciplinary value for the mind, without much regard to its content. The old idea was that grammar and mathematics are the indispensable disciplines in school training. The new insight appears to be that geography and history, or other studies, will serve the purpose equally well. The validity of this theory is discussed in a very able article by Prof. Hinsdale, of the University of Michigan, in a recent number of the Educational Review. That article, perhaps, better than anything else of recent origin, brings down to date on the question of the worth and worthlessness of the idea of formal discipline of the mind by any restricted group of studies.

Some try to meet the new difficulty concerning the cur rectum by taking into the course of study all good things; but such efforts defeat themselves so quickly that they may be downsed at once.

Col Parker's most recent and most notable book seeks a solution by basing all concrete study on the central sciches of mineralogy, geology, geography, astronomy, meteorogy, biology, zoology, anthropology, ethnology, and history, or, in other words, upon a hierarchy of sciences.

We have, on the other hand, equally earnest attempts to subordinate science studies to the humanities. The monume ntal work of the late Prof. Ziller, of Leipsic, a disciple of Herbart, must ever stand as the prototype for all efforts of this kind.

Finally, men are trying to solve the problem of the curne valum by a rational selection of typical studies in all improper tant departments of learning to the end that a fairly
had anced development of mind may be secured for all children and that each individual may find himself in touch
with the forces that will determine his destiny, and to the
chief that he may wake at the beginning of active life to find
himself an adherent of the dust covered ideals of the past,
and quite out of touch with his own most potent environment

Before discussing in detail the various problems pertanny to the selection, sequence, and articulation of the studies of the curriculum, however, there is an antecedent problem whose solution will in large measure determine their solution. It is to this antecedent problem that attention is now directed.

THE ETHICAL FUNCTION OF STUDIES.

Before the time when the world decided for universal education it was decided to dissolve the marriage between church and state, thus leaving the divorced pair to quarrel over the control of their child, education. So long as only a few persons were to be educated, the church could fairly hold the field. But when all were to be schooled, only the state had the power and the money to do the work. result is a general dissatisfaction, sometimes assumed, sometimes expressed, but always earnest and insistent, with the mability of the public school to develop the moral character of the pupil upon a religious basis. The assumption is made, and not always refuted, that virtue to be real must have an ecclesiastical foundation. This, too, is an inherited idea that arose when the world was busily engaged trying to make all men think alike about religion. But the idea is a very potent one with many people and has a certain justification. How has the public school met the criticism? By ignoring it; or by declaring that education is a divided function; one part, the intellectual, belonging to the state. and the other, the moral, as based on religion, belonging to the church But Herbart and his followers teach that except for the inculcation of dogma and the training in ecclesiastical ceremony, the public school is an adequate agency for the development of moral character. This, if true, is important. Even more than we need to know what to teach do we need to know how to temper our school intellectualism by effective moral training.

What is the new idea that Herbart contributes to the subject of moral training. We have long talked of the liberalizing and humanizing effects of knowledge; as Prof. Thomas Metcalf used to say. "Algebra conquers adipose;" and we have long recognized the powerful individual moral influence that a noble character on the part of the teacher has upon the pupil. What more is there? Herbart declares.

"Instruction in the studies of the public school must be made to reveal to the pupil the moral order of the world; and not only must it furnish this moral insight, but it must so touch the heart that a permanent right disposition toward all men, both in their individual and in their organized capacity, may result."

The first implication of such a demand is that the studies must no longer be purely formal or restricted to two or three subjects. Grammar, indeed, investigates the forms of thought and trains to mental acuteness, but it reveals no moral relations; the same is true of number, which is the formal quantitative study of inorganic nature. Both of these subjects are useful and necessary, but in themselves they contribute only very indirectly to any moral insight. But in literature and history and geography we may hear the very heart-beats of the race, as it struggles with temptation or rises on the wings of aspiration. Through science, properly taught, we become aware of our ethical duty toward the lower creation, and we study, moreover, the conditions under which men must meet and strive and live together. All this means that if school studies are to reveal our duties to ourselves and our neighbors, and to sweeten our disposition toward others, they must be full and rich, throbbing with the life of the world, and no longer merely formal, cold, and abstruse. What consequences does this involve for the teacher! He must no longer drag out his weary days on the treadmill of routine, but he must seize the spiritual sense of the English literature, the richest under the sun; he must understand the moral significance of human history as unfolded, not by a machine-made textbook, but by the great masters of language and historical insight; he must read the book of nature in the original. not in translation; he must comprehend the meaning of the civilization about him in its governmental, social, and business aspects. All these things he must know, for how can he make study reveal that of which he himself is unconscious? To reveal the moral order of the world, not alone in its subjective aspects but in all its manifold and farreaching objective relations, as seen in family, civil, business, and social life is a task that implies not only faith and high purpose, but broad knowledge and deep insight as well.

The second implication contained in the idea that instruction make a moral revelation of the world to the pupil is, that the making of the curriculum in all its details is a work of magnitude and importance. The late Dr. Frick, of Halle, in company with a hundred able schoolmen spent eight years in experiment and study upon single studies or groups of studies before he ventured to offer to the world the outlines of an organically developed, well articulated course of study for secondary schools. Prof. Rein and his assistants also worked for years upon their Acht Schulpahren, or course of study for elementary schools. In like manner our principals and teachers must struggle with the outline programs offered by groups of experts like those represented in the report of the committee of ten and that of the committee of fifteen.

A third implication is that moral character can not be glued on to the pupil by any external system of ethical instruction superimposed upon intellectual education, but must grow out of the very heart of studies themselves, through the nature of their content, and by keeping them in close touch with a few fundamental ethical ideals.

In the light of this idea of instruction the moral purposes to be subserved by instruction assume clear outline and definite content. It is assumed that we are all working in the school-room for the uplifting of humanity, and so we are; but in many cases it is the blind leading the blind. Will not the teacher who makes this principle the guide to his study, the high ideal of his teaching, have a new lease of spiritual life? Drudgery and routine we cannot wholly avoid, but they need not be the dominating facts of our teaching experience. They may be transformed by a clearly perceived spiritual purpose, just as love is capable of turning painful labor into joyous service.

In pursuance of this initial purpose of instruction, the Herbartians emphasize first of all the painstaking study of the conditions and development of the child's apprehen

sion, or apperception, as the only reliable guide to the selection of the subject-matter and the methods of presenting it to the child. The same problem is attacked from the physiological side in the child study so ably and so vigorously represented by President Hall. Those who have read Lange's book on Apperception, translated by the Herbart Club, will understand how completely this idea determines all that the Herbartians do in the way of selecting, articulating, and teaching the various branches of study. The Herbartians do not always agree, but whatever they attempt is always done in the sacred name of the child-his understanding, his sympathies, his interests, his feelings and mental stages, his natural ways of living. With them all educational psychology focuses upon the processes of mental life as exhibited in the child. With the ethical purpose as an end and the apperception of the child as a guide, each of the problems of education is examined, the most important of which will now be considered.

CORRELATION. CO-ORDINATION, CONCENTRATION OF STUDIES.

The etymological variety found in the terms correlation, coordination, concentration, is an index of the indefiniteness with which they are used by teachers.

The appearance of the report of the committee of fifteen upon the correlation of studies and the debate upon it at Cleveland, have made it apparent that the term correlation must receive a wider interpretation than has been given to it hitherto by writers of the Herbartian school. Pretious to the appearance of the report, current educational literature had assumed that to correlate studies is to make the pupil aware of interesting and valuable cross-relations existing between them. This form of correlation, to be established for psychological and other reasons, is meant to appeal directly to the consciousness of the pupil. It is designed to enhance his understanding and interest, to economize his effort, to enlarge his outlook upon life, and above all to produce a favorable effect upon his conduct, by deepening his insight, improving his disposition, and strengthening his will.

The report itself, however, has quite a different conception of correlation. Briefly stated, it defines correlation to mean the harmony of educational functions performed by the various studies in enabling the pupil to master his environment, and to become fitted for his work in life. Each study, therefore, must be questioned as to its peculiar office in fitting the child for civilization, so that the report in its main scope is nothing more than a critique of educational values, an estimate of the worth of each study in a system of education. The studies are conceived to work together for the accomplishment of a common end, the education of the child, just as the legislative, executive, and judiciary work together for their common end government. Each presupposes and is reflected in the other, without which it would have small power to accomplish its ultimate purpose. Legislation without execution would amount to nothing; so mathematics alone would have small value in fitting the child to be a citizen, or as the Herbartian would say, it reveals to him his place and office in the moral order of the world. This form of correlation is wholly objective, since the pupil need never be conscious that such a correlation exists. The studies may be as distinct from one another in the school-room as a judge is from a legislator, or as the executive is from both. Heretofore such investiga tions have been classed under grounds for the selection of studies, but at present there is nothing to do but to enlarge our conception of correlation so as to cover two distinct fields, as follows:

- I. Objective Correlation.
 - 1. The Educational Value of Studies.
 - 2. The Equivalence of Studies.
- II. Subjective or Psychological Correlations.
 - 1 Concentration, Subordination of Secondary to Primary Studies.
 - (1) Ziller.
 - (2) Parker.
 - 2. Correlation Within Departments (Geography, History, Science, etc.)
 - 3. Correlation of Departments (Geography with History, etc.).

THE EDUCATIONAL VALUE OF STUDIES—THE DEMANDS OF CIVILIZATION VS. MENTAL DISCIPLINE AS THE BASIS OF SELECTION.

Taking up these problems in the order given we come first to the problem of educational values as a basis for the selection of studies. The report of the committee of fifteen upon this subject is a noteworthy document, since it abandons the dogma of formal culture or mental discipline that has hitherto reigned supreme in American education, and adopts in its stead substantially that demanded by the Herbartians, namely, the idea that the primary purpose of instruction in the branches of learning is the moral revelaton of the world to the child. The old motto was "disciplus and knowledge," the former at all hazards, the latter of there is time for it; the new motto is "discipline through knowledge." The report substitutes the demands of civilitation for the former psychological demand of mental discipline as a guide to the estimates of educational values. Whenever a new method is discovered or a new standpoint adopted for any field of thought, the meyitable consequence Is that an entirely new survey of the whole must be made Ims part of the report of the committee of fifteen, being based upon this new Herbartian principle of institutional morality offers an almost inexhaustible mine for fresh investigation. Prof. Hinsdale's article on the dogma of formal culture, already referred to, and to be found in the last volume of Proceedings of the National Educational Association, as well as in the Educational Review, will help any teacher who reads it to understand the great limitations and the general unfruitfulness of the old method of estimating educational values.

THE EQUIVALENCE OF STUDIES.

There is another phase of the objective correlation of studies not emphasized in the report, but necessarily considered wherever the principle of electives is introduced. This is correlation in the same sense in which we speak of the correlation of forces; as when, for instance, we say a

given amount of motion may be transformed into an equiv alent quantity of heat, or electricity, or light. There are many languages, some ancient, some modern; one person cannot afford to study them all, for to a large extent one is the educational equivalent of another. So, too, there are many sciences, all pursued by substantially the same method. Here also the principle of equivalence should be considered. since knowledge has now become so inexhaustible in extent that we must perforce content ourselves with the study of types. This aspect of correlation, nowhere exhaustively treated, is briefly touched upon in the concluding chapter of Fitch's Lectures on Teaching. It is a problem for the future, which, like that of the selection of studies, may be approached from the old standpoint of formal mental discipline, or from the modern one accepted by Dr. Harris in the Report of the Committee of Fifteen, viz., the function of studies in fitting the child for the complex civilization in which he must live.

THE SCOPE OF PSYCHOLOGICAL CORRELATION.

Using the term correlation in its broad sense of mutual or inter relations among the studies, all forms of organization for the various branches may be brought under it. The question now naturally arises. What is left of correlation when its objective phases have been eliminated? Much. Objective correlation decides that a given study, say Geography, has an essential office in fitting the child for his future career. Geography must, therefore, go into the program; but where? For what length of time? To develop according to what principle? How shall it be brought into relation to history? To science? How shall it be taught to appeal most powerfully to the child's mind, to effect his conduct most favorably? There is no answer to these questions to be found in objective correlation. The course of study recommended in the aforementioned report has no visible organic relation to the study of educational values found in the same volume, but is seemingly made up arbitrarily from opinion and experience. It does not develop from the principle of the educational function of the studies

themselves; but the important things for the teacher to know, after his studies are selected for the whole course, are to be determined by principles arising from the nature, age, and ability of his pupils; that is, from psychological considerations. The most essential problems are as follows:

- 1. When shall a study be first introduced?
- 2. Upon what principle shall it unfold, or what shall determine the sequence of its parts?
- 3. What shall be the organization within an important department, such, for instance, as science?
- 4 How shall its relations to kindred subjects be estabhened so as to involve the minimum of time and labor, and to secure the maximum of interest, knowledge, and development of character?

The solution of these problems depends primarily upon the apperceptive capacities and interests of the child. To a certain extent, the logical unfolding of a subject, like mathematics, may determine the sequence of parts, but such considerations are secondary, and to be subordinated to the laws of apperception. Just as Kant shows in the "Critique of Pure Reason." that the mind gives laws to nature, since nature is but the sum total of the real or possible experiment to be acquired in accordance with mental constitution of not at all. So the followers of Herbart show that the applicables and interests of children point the way to the solution of all the problems that arise in connection with the course of study.

THE PRINCIPLE OF SEQUENCE FOR CULTURE STUDIES.

We have now to consider in outline a topic to be treated much more fully in the paper on "Culture Epochs" by Dr. Van Liew. The idea as a pedagogical reality originated with the late Prof. Ziller, of Leipsic. He finds before him the child whose mind develops through somewhat distinct epochs of apprehending power, imagination, capacity to reason; through different phases of moral insight and disposition as well as of childish sympathies, tendencies, and and ruling interests. Is there any development in the sub-

ject matter of education that corresponds to this growth of mind in the pupil? Of necessity Ziller could not be content with the bare mechanism of learning to be found in reading, writing, arithmetic, and other formal disciplines, and which may easily enough be graded in difficulty; for, to his mind education must also be concrete, must build up positive idea-structures which will not only reveal the moral world to the child, but which will at the same time excite his sympathetic interest in the ideas themselves. With this conception of education, nothing could be more natural than for Ziller to turn to literature and history as the main receptacles for concrete moral ideals. In the history of civilization, however, no fact is more apparent than that the race has, on the whole, been in a constant state of development. There was no difficulty for a German professor with his eyes fixed, now upon the culture about him, now on the history which told of the struggles of his savage ancestors with the Lagions of Rome, to comprehend that the German race has risen rapidly through a succession of culture stages each of which is described in history and embodied by the imagination in literature. The idea is now close at hand that perhaps each child lives through in little all that the race has passed through in large. Looking farther he finds. as Prof. Rein says, that this idea of the analogy between the individual and the general development of humanity is a common possession of the best and most noted intellects. It appears, for example, in the works of the literary heroes, Lessing, Herder, Goethe, and Schiller; with the philosophers, Kant, Fichte, Schelling, Hegel, Comte; with the theologians. Clement of Alexandria, Augustine, Schleier macher; with the evolutionists, Huxley and Spencer; with the classical philologists, F. A. Wolf, Niethammer, Dissen, Lubker; with the educators, Rousseau, Pestalozzi, Froebel. Diesterweg, Herbart, Ziller and others.

Convinced of the truth and importance of this analogy. Ziller at once proceeds, in the name of the child's apperception and spontaneous interest, to arrange the leading studies, literature and history, in accordance with the various culture epochs—During the first year, fairy stories from

Grimm form the leading material. In the second year, Robmson Crusoe becomes the center of activity. In the third year, the earliest and most primitive Bible and profane history join with literature to form the nucleus of the curriculum. Thus history begins with myths, legends, heroic tales: then merges into biography, and finally culminates in history proper, somewhat in accordance with the recommendations found in the report of the committee of ten, which says that history should begin with mythology, pass on to biography, and culminate in history itself, though there is no special recognition of culture epochs in the report. In the same way Ziller makes literature correspond in grade and culture epochs step by step, as far as it is contimed. So much attention is paid to Bible history in his plan that literature does not receive the attention its prortance demands, for literature must, in the nature of the case, be to the public school what ancient languages were to the academy, -its chief source of culture. If we take the world literature in English we have the culture content of the old languages plus much that they have never contained, but minus their grammatical and etymological elements. These have to be supplied by other agencies.

Ziller was the founder and Dr. Rein the continuer of what may be termed the radical school of Herbartians. Prof. Stoy, of Jena, and Dr Frick, of Halle, were the leaders of the conservative branch. The latter did not subscribe fully to the idea of culture-epochs as an invariable guide to the sequence of topics, but urged that the present environment is quite as important, and that even if present conditions of organized life are complicated, they may easily be separated into their elements and thus successfully taught. Think, for instance, of the German child's capacity to understand the last Franco-Prussian war as compared with his apperceiving power in the case of the primitive warfare ancestors waged against Rome The agencies for prose cuting the former-the railroads, the modern arms, the standing army, are all features in every German child's environment, whereas only as a result of much teaching could be form an accurate idea of the conditions as they existed at the earlier time.

Both of these views assume the supreme importance of the child's apperception in determining the sequence of culture subjects, the one emphasizing stages of mental development, the other the force of present environment. American schools Biblical history has no place, so that the concrete culture subjects are limited to literature, history, and art. It is an open and debatable question just how far the principle of culture epochs in these subjects should be emphasized, and to what extent we should depend upon the elements of the present environment to guide in the sequence of topics. It is a strong point for the formal nature of the culture epochs that they may, so far as they have any validity at all, be presumed to appeal to all children alike, whereas the environment of a given child may lack many of the most important elements for apperception and interest. Compare, for instance, the environment of a farmer's boy upon an irrigated farm in the arid region, with that of a boy on a Dakota wheat ranch, or with one upon a New England stony truck patch. Their apperceiving concepts, even about country life, will be quite different. Still greater contrasts are found between city and country life, and between different social stations. On the other hand, it must be remembered that only the most skillful historians are able to bring to the mind, even of an adult, the social, political, economic, and physical environments of ages long past, and that nothing appeals so powerfully to the mind as knowledge founded upon actual observation.

CONCENTRATION —THE SUBORDINATION OF SECONDARY TO PRIMARY STUDIES.

1. ZILLER'S PLAN.

Ziller's scheme of concentration is briefly as follows:

1. The culture studies, biblical and profane history, and literature shall be the center about which all other subjects shall be concentrated.

2. The central subjects shall develop according to the sequence demanded by the culture epochs.

3. The other, or secondary subjects, shall have no independent principle of sequence for themselves, but shall

wait upon the associations that arise in connection with the central subjects for their place in the program. 4. The development of character is the primary purpose of the school and all the ideas of the child shall be connected and focused upon the good at all times. 5. The moral interest must therefore be perpetually stimulated.

It may, perhaps, be successfully maintained that Ziller conceived of moral interests very largely in a subjective way, that he sought rather to dissolve the soul in sentiment than to arouse strong, active interests in the objective world of institutions. Prof. Voigt criticises the fourth point, saving that we often promote the good most powerfully when we use indirect means. He thinks the child resents too much preaching and moralizing, protesting his individvality by resistance. He also objects to the effort to fuse all ideas into a single mass, saying that both interest and conduct are as much hindered by irrelevant or opposing meas, as they are aided by relevant and supporting ones. He thinks that it is not necessary to try to move the whole arcle of moral interests at every lesson and in every subject but regards it as far more important that the mind should often be permitted to busy itself with things of purely esthetic or intellectual nature, quite irrespective of their mmediate bearing upon conduct,

Perhaps the most serious drawback to Ziller's plan is that it tends to displace natural and important relations existing among subjects with relations that are non-essential, iantastic, or artificial, since they might just as well have been otherwise. They serve at best for giving vividness and color to instruction, and should be classified as didactic devices.

If the primary object of education is to enable the child to master the elements of his civilization through the various studies, it must be clear that one phase like History or laterature should not be allowed to dominate and subordinate others which, if different, are equally important. Why should natural science be dissolved in literature? Why are the civic lessons that may be drawn from History more powerful in affecting the will and destiny of the child than the

economic lessons that may be drawn from Geography? Why should whole departments of learning remain in leading strings to Literature and History? Are these departments not of sufficient coordinate importance with the latter studies to be worthy of following their own principles of sequence and of having their elements correlated with one another rather than with the elements of subjects foreign to them in nature and development?

Science has only fairly emerged from the shackles of literary treatment in the high school and college into independence and consequent value as an instrument in education. To begin the old subjection over again in the elementary school upon the plea of concentration would seem to cancel in principle the advance we have made in practice. While acknowledging the fruitfulness of many of Ziller's suggestions concerning concentration, it must still be urged that on the whole his work rests upon a distorted psychological view of the child and an inadequate conception of the functions of the studies in fitting the child for civilization. The subordination of other studies to Literature and History costs more than the resulting organization of studies amounts to.

THE SUBORDINATION OF "FORM" TO THOUGHT STUDIES.

2. PARKER'S PLAN.

With Ziller, as we have seen, the Primary studies are the culture subjects, history and literature, since these are presumed to be of the highest moral value, but with Col. Parker a different basis is adopted for the selection of the primary subjects. The latter's "Theory of Concentration" has for its chief problem the relation of expression to thought. The fundamental idea of the book appears to be that the studies that deal mostly with the forms of expression like reading, spelling, writing, grammar and arithmetic, should no longer hold their place as formalized and isolated studies, but should be brought into the closest relation to the various concrete thought studies of the curriculum. Furthermore, in contrast with Ziller's history and litera-

ture as the moral backbone of the course, the concrete thought studies recommended in Col. Parker's "Theory of Concentration" belong mostly to what we should designate nature or science studies. The central subjects comprise mmeralogy, geology, geography, astronomy, meteorology, mology, zoology, anthropology, and history. There is to be the closest correlation possible among these subjects, the logical, or philosophical relations existing among them being the guide to their unification. This effort reduces the whole to a hierarchy of sciences, with philosophical unity existing between the various elements of the subject matter, and strict subordination of "form" to "content" studies. The problem is therefore a double one, coordination of mowledge subjects, and subordination of studies of expression to those of thought. It will be seen, therefore, that this volume attempts the solution of a number of important problems pertaining to the curriculum. The most obvious may be stated as follows:

1. The backbone of the course shall be nature, not cul-

2 The elements of the knowledge studies shall be closely correlated or coordinated.

3. The principles of sequence and association shall be the natural law binding all together—the law of energy working through matter. The principle of correlation is therefore not culture epochs (is it the epochs of natural relation?) or even primarily the apperceptive needs of the d but at bottom the principle of philosophical unity that binds all nature into one.

4. The principle of concentration comes in when a place sought for what are usually called "form" studies, and which pertain mostly to language and nature. They are to be strictly subordinated to the content subjects, that is, in grow out of them and to be connected with them, as language grows out of and is connected with thought. They are not to be taught as separate disciplines, or independent studies, but shall be purely resultants of intrinsic thought.

Not only does the book attempt the solution of old problems, but it raises new ones of its own, some of which atturally suggest themselves as follows:

- 1. Is it wise to lay so much stress on nature studies, which are the product of our own times, to the neglect of those of humanity, which have nurtured all the races of the past? Civilization has been possible without science. Shall the product of civilization become its chief source?
- 2. Is there danger that the so-called formal studies, which have been the main reliance of the school in the past, will gradually lose their significance as instruments of education if they are to be wholly subordinate to other studies? Will not that which is habitually regarded as subordinate be in the end considered unimportant, and suffer a corresponding neglect?
- 3. Is the philosophical conception of energy working through matter in accordance with universal law a safe workable basis for the presentation of knowledge to children? How many scientists have we that clearly comprehend this grand unity of nature, and not only of nature, but of nature and man? Will not the blind be leading the blind when elementary teachers make serious attempts to follow such a principle?

Whether this conscientious effort to solve one of the greatest of our educational problems raises more difficulties than it removes or not, it must remain what it is, a monument of faithful research, a stimulus to thought and progress.

CORRELATION WITHIN DEPARTMENTS OF STUDY.

If the correlation of studies is to be based upon abiding and important relations existing among the elements of knowledge as opposed to accidental and less important ones, then it follows that correlation within departments is antecedent to correlation of departments; for, it seems to lie in the nature of the case that the progressive and evolutionary principles that organize a set of facts into a subject like history, botany, or arithmetic, are more important and essential than cross relations which may bring the subjects into juxtaposition at certain points. One set of relations is constant, the other occasional. Our first problem in this

connection is, therefore, the proper correlation of parts within the various departments. Geography has been taught as three or four isolated subjects, like political, mathematical, physical, and occasionally commercial, geography. These should be blended into a unit, for each presupposes and implies the other. There are many elements of difference in nature, upon the one hand, such as chimate, soil, relief, fauna, flora, etc.; and in man, on the other, such as race, occupations, habits, education, religion, government, and the like. Yet all these elements of difference are blended, unified, and utilized for the benefit of mankind through industries and commerce, and by means of political and other institutions. (Think how the United States is unified through the press, education, and government, and the tropic and the temperate zones through commerce).

In the same way history has had little unification in the schools except through the barren category of chronology. Explanations of determining political, economical, and geographical causes that have made history what it is do not get into the text-books; so that our children are taught a few isolated facts, which in their minds have no adequate ground of existence, and no consequences as new causes. Elementary science is so devoid of organization that most schools either never attempt it or fail to secure satisfactory results.

We must then seek for the most effective unifying principle for each department of study, which will naturally be the leading purpose why we pursue the study at all. Here the objective basis of correlation found in the function of studies will assuredly be our chief guide. Thus in geography, for example, the fundamental reason for the existence of the subject is not to be found in astronomical, or purely physical or political facts, but in a comprehension of how namen industries, institutions, and commercial activities statize these elements of difference for the happiness and well being of the individual and the progress of civilization. That is, all geography finds its unifying idea in what may be called the economic conceptions.

But in seeking out the elements of a given department, which are to be correlated according to some leading idea, we come at once upon important cross-relations existing between different branches of study. An illustration is seen in the mutual relations existing between geography and history. In the study of geography, that of (political) history bears an insignificant part, but it is quite otherwise when we examine history. Here we are dealing with a process, not a product; so that physical and human elements of difference have, substantially, a determining effect upon the course of events. This brings us to a new problem:

THE CORRELATION OF DEPARTMENTS.

At this point we come to an appropriate use of the word coordination as opposed to concentration in the Ziller sense, for here there is no attempt to subordinate nature to culture studies, or form studies to thought studies. On the contrary, since each department has its own well defined function in effecting the education of youth it never loses its identity as an integral part of the curriculum or surrenders its right to a sequence of parts determined by its own nature. Its correlation with its fellows is, therefore, a coordination, not a subordination, or concentration. The extent to which a study should preserve its integrity as an independent branch is well presented by Dr. Charles A. Mc-Murry in the Educational Review for May, 1895. He says: "But the practical teacher is certain to ask the question, 'How far shall we follow these relations of geography to natural science, history, etc.?' Just so far as they explain and clear up the central geographical topic with which we started out, without overloading it. We have no right in the midst of a geographical discussion to run across to some scientific topic, and in the treatment of it to lose sight of the original subject. If this were true, we should be equally justified in running on from the natural science topic into history and never returning to our original point of departure. But this would lead to total confusion of studies.

"If we have started out to treat Niagara Falls as a geographical topic, let us arrange and present all the facts

drawn from different sources which make clear this great natural phenomenon in its important relations to nature and to man. In treating Niagara Falls in geography we have no right to totally lose ourselves in the history of geological formations, in erosion, or in those physical processes by which water-power is converted into electricity. Such a method of treating geographical topics is wholly illogical. It is without center or circumference, and drifts without aim from one subject into another. The centripetal force that holds us to the essential aspects of a central type-study is the only thing that can save us from hopeless drifting.

"To treat well such an important type-study in geograpay requires a teacher who never loses sight of the central object, who can see and trace out the relations of this main topic to other studies without losing his head. He must know the difference between the center and circumference of his subject. He must maintain a sort of judicial balance, which enables him to keep his bearings, to skirmish along the outposts, and yet to keep the center intact. We have been accustomed heretofore to treat topics in any study in such an isolated way, not tracing relations into other studies. that the moment we begin to see and emphasize relations we are in danger of overdoing it. The teacher of the future will need more skill and prudence, more mental balance, so as to keep a just equilibrium between the drawing power of central topics of study and the desire to trace out the intimate and vital relations to other studies."

The problem of coordination of departments of study includes many other problems already alluded to, among which are (1) the time of introducing and dismissing each subject. (2) the principle of sequence for its parts with respect to its own nature, the apperception of the child, and its relations to other subjects; (3) the transient associations that spring from the circumstances of the recitation, whose chief object is the enlivening of the instruction; (4) the important and inherent causal relations that tend to unify knowledge, and (5) the relation of "form" to content studies

Laterature is a potent means for bringing subjects into juxtaposition, thus showing interesting, but, on the whole,

non-causal relations. There is a literature of biography, of history, of conduct, and of more ideal human relations; there is also a literature of science and industry. It is quite possible to blend the objective study of any subject with its ideal literary illumination, much to the enhancement of interest and breadth of sympathy. This form of correlation brings the æsthetic and the intellectual into association. It tends to humanize the disposition, to liberalize and sweeten the whole view of life.

The subject, however, that most universally unifies the curriculum is geography. We have already seen that the physical geography of a country is an inherent part of its history, since the course of events is largely determined by it, and also that the political and economic conditions of the country as they once existed were also determining factors in the progress of events. In short, in so far as history is not determined by subjective causes, it must be determined by the environment, whose details it is the business of geography to explain. To some extent, at least, history bears the same causal relation to geography, since all industries and institutions described in geography, as well as the whole aspect of nature, undergo changes which history has recorded. It is, of course, always a question of expediency as to how far the history of present geographical facts should be traced; yet, on the whole, it must be admitted that things appeal to the mind largely in proportion to the insight which we have of their genesis and progress. In similar manner it may be shown that geography has most intimate relations to all forms of biological and industrial science, and that it is not unrelated to the sciences of chemistry and physics.

PROPOSITIONS DEDUCED FROM THE FOREGOING EXPOSITION.

- 1. The highest function of the studies is an ethical revelation of the elements of civilization to the child.
- 2 Each department of study has a distinct ethical office in fitting the child for life, and should for this reason, if for no other, retain its integrity as a subject of study.

3. The term CORRELATION is universal, and includes both COORDINATION and CONCENTRATION. Concentration subordinates secondary to primary subjects, while coordination associates related subjects, allowing each to retain its integrity as a distinct study, and permitting it to have its own principle of sequence of parts.

4. Objective correlation, as treated in the report of the committee of fifteen, discusses the relative educational value of studies, and involves a consideration of their equivalence. It is made by the philosopher in his study, and does not appeal to the consciousness of the child in the school. It merely determines the function of each study in enabling the child to master his environment, thus giving the reason for its presence in the curriculum; but it determines nothing as to time, amount, sequence of parts, or the relation to other branches that it should have in the recitation.

The demands of civilization should take precedence of formal mental discipline as a guide to the selection of stations.

"The apperception of the child is the basis for those phases of correlation not covered by objective correlation. It determines the position of studies in the curriculum, the procepte of sequence to be observed in their progress, and the rinternal and their external organization, i. e., correlation within departments, and correlation of departments.

7. The sequence demanded by culture epochs must be recognized, but must be kept in subjection to the demands of the child's environment.

* Ziller's scheme of concentration, which subordinates 4d other branches to history and literature, is to be rejected 4d principle, since his ideal of the ethical value of studies 4s too subjective, failing to recognize properly the function of the other studies in fitting for the social, political, and economic functions that the individual must perform in a complex civilization.

9 Col. Parker's plan of concentration gives us our best becassion of the relation of "form" to thought studies, but be open to criticism in that it tends to emphasize nature at the expense of culture subjects, to destroy the identity of departments, and to cause confusion by using too universal a principle as a guide to sequence.

- 10. The first and most important problem of correlation is organization of parts within each of the departments of study; for, in a last analysis, correlation is important according as it is based upon perceivable and essential causal relations, as opposed to artificial or sentimental ones. Viewed in this way, it must be apparent that, on the whole, the relations that give sequence and coherence to a department of study are more essential and interesting than occasional cross-relations that may be found between different studies.
- 11. The correlation of departments is useful, however, because of the increased understanding and interest on the part of the child, and because of its value in educating the child to consistent and forceful conduct.
- 12. Literature is useful in bringing the æsthetic and the intellectual into helpful association.
- 13. Geography is the most universal, concrete correlating study, and perhaps more than any other may follow the lead of the other branches.

CONCENTRATION.

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THESES.

The following are the chief theses maintained in this paper:

- It is an essential part of good instruction to relate ideas closely and abundantly with one another. The law of apperception demands it. The topic that deals with this matter is properly called concentration, rather than correlation or coordination, of studies.
- II There are at least six weighty arguments in favor of concentration:
 - (1) It lucreases strength of character.
 - (2) It increases the apperceiving power of the mind.
 - (3) It increases interest in general, especially interest at the beginning of recitations and in review.
 - (4) It increases thoroughness of knowledge.
 - (5) It saves time and prevents the curriculum from being crowded.
 - 6) It strengthens memory.
- Ill concentration aims at a psychological rather than a philosoph-
- 11. The studies in the common school curriculum are by nature closely related to one another.
- V in order that the child may appreciate this relationship, the studies must be carefully arranged with reference to one another. The history of teaching indicates that in making such an arrangement, a center must be chosen about which thoughts shall be associated.
- VI Neither the teacher nor the child can be this desired center: that duty must fall to one of the studies in the curriculum, to which the other studies shall be subordinated.
- If The unity and individuality of the separate branches need not be destroyed by such subordination.
- of the school, literature and history are the most important subjects of study; hence, they can best form the center for
- Willistory as the central study for the upper grades is ab/indantly and closely related to other subjects; literature as a center for the lower grades is also probably sufficiently related to secure the proper kind of concentration.

HE principle of apperception declares that what one can know and feel and will depends upon what he has already known and felt and willed, or that past experiences are the sole basis for intellectual, emotional, and ethical growth. Accordingly, excellence in teaching consists, first of all, in fitting newly offered ideas closely to these past experiences as their base or foundation. The first requisite to this end is that the subject matter of instruction be intimately related both to the kind of thinking and to the topics of thought which most naturally occupy the child's mind. Suitable matter will vary according to age and stage of development. There is probably a period in each person's life when any book, or indeed any thought, can be most highly appreciated. If we could only discover and take advantage of this most opportune moment for offering every bit of knowledge, what a wonderful economy of effort would result! Children's brains would then continually be stirred by what they received at school. The theory of the culture epochs, i.e., that the child passes through the same general stages of development through which the race passes, is influencing teachers to select courses of study with special reference to the fitness of their subject matter for certain stages of child growth. If the development of the race is in general like that of the child, what specially interested the former at a certain age will appeal with most force to the latter at the corresponding age; consequently that is what should be given him. By this arrangement the content of each study can be fitted more closely than otherwise to the child's past experiences and become more fully a part of him. That means that a high degree of apperception will be secured: the theory of the culture epochs is, therefore, only a subdivision of the very broad principle of apperception.

But even when the subject matter of the studies has been chosen with most careful reference to the culture epochs idea, and can be taught according to the most an proved method, provision for the highest possible de apperception is still incomplete. There is still t danger that the different branches will remain unrelated to one another in the child's mind; in fact, that danger is never entirely avoided even in our best schools. For example, many a pupil fails entirely to associate Spain and Genoa when studying geography, with the Columbus talked about in history; or a poem in literature referring to the Rhine river, with the Rhine river studied in geography. Many a one fails even to associate facts on the same topic. if learned at different places or at different times. I have found a number of high-school pupils who scarcely knew whether the Palestine of ancient history was the Palestine of the Sunday school or not, or to whom it had never once occurred that the Sea of Galilee of the school geography was the Sea of Galilee of the Sunday school. Often a question easily answered in one study causes surprise or confusion when asked in another branch, merely because the two have been taught entirely dissociated from one another.

But full apperception, or a full appreciation of facts, requires that the relationship among them be felt, hence, special provision must be made to secure a close association of studies. The topic which deals with this matter has been loosely termed either correlation, coordination, or concentration of studies. Concentration is probably the most appropriate term, since correlation is too broad for this one indea there being other kinds of correlation than that between the studies; and coordination is misleading, it being impossible to relate the studies to one another without making some of them dependent on others, instead of coordinate with them. For example, the formal studies are by their very nature dependent on the thought studies. It is endent that concentration, like the culture epochs idea, is only a subdivision of apperception.

The principle of concentration makes the demand that the numerous parts of the course of study be closely associated, so that the light they cast upon one another may lead to more complete apperception, or to fuller knowledge. In times past good teachers have thought little about this point. They have been inclined to feel that their whole duty in instruction was performed when they had succeeded in

fixing thoughts clearly and accurately in pupils' minds But one of the greatest advances that recent pedagogy is effecting is the conviction that, when so much is accomplished, the work of instruction is only half finished. Recent pedagogy declares that the number and closeness of relations into which an idea enters are as important as the vividness and accuracy with which it is conceived: hence the relationship among facts is becoming a separate and a great topic in school work, and in all teaching.

The principle is having a marked influence first upon the individual recitation. It requires that any fact that is taught shall pave the way for what follows, in order that all may be tied together. There should be no careless springing about from point to point, but on the contrary there should be such a careful leading up to each thought that the pupil can at least dimly anticipate what is coming. Isolated, irrelevant matter is, therefore, ruled out. is little use for "general exercises," or for "information lessons," or for such a book as John Trainer's One thousand questions in American history (much used in Illinois), or for common reading-books when the selections in them have no direct bearing upon the interest and occupations of the pupils Each recitation hour should present a section of a continued story, and should afford a training to the child in connected thinking.

As usually interpreted, however, the principle of concentration refers particularly to the establishment, in the child's mind, of a close relation among the several studies, rather than to the relation among the parts of a single study. There are few ideas that appeal so forcibly to teachers as does this one of relating the different branches, and many of them are making earnest attempts in this direction. But discouragement is very frequently the final outcome, for the efforts put forth only serve to show what an enormous undertaking it is. It will be many a year, probably many a decade, before a majority of our teachers will apply this principle to their courses of study in a systematic way; many a time teachers will halt and inquire whether or not it is worth the effort.

The encouraging answer can come only from a well developed theory on the subject; definite reasons for attempting concentration must be established among the teacher's firmest convictions before sufficient energy will be generated for the task at hand.

II.

Consequently the reasons for concentration will be the first general topic for consideration in this paper, then will follow a discussion of the plan by which the desired connection among the studies may be established in the child's mind.

(1) The primary motive for concentration is strong chararter Strong character, or firm and consistent conduct. can come only through the unity of one's personality, or through the unity of one's historical ego. If his historical ego, or the series of events that have made up his psychic life consists of a long list of loosely related experiences, he cannot be said to have complete unity of personality; it is at least partially divided. What is meant by such partial mission is made clear by examples of extreme division of personality, as seen in the phenomena of double consciousbess. These phenomena are typified in the extremely interesting story of Dr. Jekyll and Mr. Hyde. In such cases there is so complete a discontinuity between two periods of psychic life that a man at one time imagines himself to be one person, at another time a person wholly different. The memory fails utterly to associate the two. sult is that any harmony between the two is entirely a matter of accident, hence character is shattered: what a man at one time admires and practices he at a different time hates and repudiates, so that consistency and firmness of conduct are lost. Such cases are abnormal and the persons are said to be unbalanced. But it should be remembered that while most people do not suffer from this evil to that extent, they all suffer from it to some extent. That is, the by thic states of each of us are often somewhat disconnected; are none of us perfectly balanced. We admit this when Te speak of the two mex within our breasts, the good and

the bad self. But, as Ribot states, there are not only two mes, but many of them, and there is the danger ever present that now one may predominate, then another. By the good me is meant the group of good thoughts that tend to guide us; by the bad me, the group of evil thoughts; and by the several mes, or selves, is meant simply the several groups of ideas that take partial or complete control of us. Experience teaches that we are not controlled by a will that is absolutely independent of everything. Were that the case, education would be impossible. It teaches on the contrary that the various spheres of thoughts that one possesses largely decide how he shall act, what he shall will to do. One's character must depend a good deal, then, upon the closeness of the relation between these spheres of thought. If two sets of ideas that are inconsistent with each other obtain control at different times, a person is said to act inconsistently; and if he shows the tendency to shift about to a considerable degree, he is called vacillating. Vacillating characters are weak. As soon as a person admits that it is largely ideas that control conduct, and not simply an independent power called the will, he sees the necessity of great unity among one's ideas in order to secure safe, consistent, and firm action. With this point in mind the assertion is made that frequent change of environment by children is injurious to character. If a boy spends his entire youth in a single community, his experiences become associated about a few centers, or into a few groups of ideas: these groups, being large and strong become the centers of control and virtually determine action. If they have become fairly well harmonized with one another -as is likely when there are so few-the boy knows himself well enough to keep his bearings. His education may be very narrow, but he has traveled so often over the same field of knowledge. feeling, and volition, that he is firm and even dogmatic in it. No doubt our Puritan forefathers owed their strength of character partly to the unity among their ideas; their education was not usually broad, but the religious sphere of thought became their controlling center, and other thought was associated with and subordinated to it.

On the other hand, if a boy travels much, especially if be travels in different countries where ethical ideas, social and business customs, vary greatly and are often contradictory, he is in great danger of confusion. The continual change of environment tends to prevent the establishment of a few central spheres of thought. Before a principle can become a conviction and gather about it enough experiences to support it firmly, the attention is called away to other things, often to principles that apparently or really contradict the former; hence it is with difficulty that he can get and keep his bearings and grow in firmness. Many an adult who has traveled abroad recalls what a struggle he passed through in order to retain his footing on religious, moral, and social questions. Hence the child, moving from place to place, is inclined to have few firmly fixed notions, just as he has no fixed abode. Ackermann of Eisenach declares that there is a difference between city and country children in this connection; on grounds already stated, he says that children reared in the country develop stronger characters than city children; the latter dwell in too large and changeable a world to build up an undivided and harcontous or strong personality. On the same ground men have believed that the course of study given to boys two centuries ago, in which the classic languages were the center about which all other study was associated, tended much more to produce steady, firm character than the course of today, in which many more subjects are taught, but in an unrelated way.

The seriousness of this topic is easily seen. Granting that people are controlled to a considerable degree by the thoughts that they have, rather than by a quite independent will, it is clear that, in order to get the full benefit of these thoughts, they should be capable of being massed quickly and of acting in unison. Ideas, just as soldiers, need to be mobilized speedily in order to meet a specific danger or demand. For instance, when a person is tempted to be all the convictions and incidents opposing that sin should come to mind instantly in a troop. If they come sauntering along, some are likely to put in an appearance

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too late; then they exert no combined influence. The old truth holds here as elsewhere, that "In unity there is strength," The same thought is forcibly illustrated also in business life. The reliable business man must be able to collect all his thoughts bearing on a given matter rapidly. When an important step is under consideration all the pros and cons that he ever heard of should be brought together and weighed. Of course it is a great advantage if this can be done quickly, for in morality and business, right actions and success are very often dependent upon speed. However, such speed is the result usually of long and careful training. We have all made the discovery repeatedly that our ideas on a given subject are very unaccommodating in this respect; they are so arbitrary in not presenting themselves just when needed. It is said that Henry Ward Beecher spent his time reading and thinking during the week, and prepared his sermons on Sunday morning just before the hour for service. If that is true, it means simply that his many thoughts were so interwoven that, when any chain of thought was started, all ideas related to it closely were so securely tied to it that they came to mind without delay: that signifies great strength. But most men do not enjoy that advantage. If they attempt to prepare a lecture or debate, they need to sit and ponder, i. e., to hunt for the things they know, and this often consumes much time. Usually they want to "sleep over" any important project before they can feel sure that they have not omitted any weighty consideration; even then they may find that something was overlooked. It is important to note two points here: first, that all the experiences related to a given subject should come to consciousness; second, that they should come quakly. If both of these conditions are not fulfilled. a man virtually has not his full self with him when he is called upon to act, or to use a very significant expression, he hasn't his full presence of mind. Unless he is contented to be slow, to wait for a "sober second thought," and to search himself carefully, his action is likely to be injudicious or immoral. In short, we see that the association of ideas is intimately related to strength of character: that when a

close connection is established among an abundance of related thoughts, one is likely to be quicker, safer, and firmer in the decision he reaches. When we reflect that life consists of a continual debate, that in all matters, whether of morals or business, men are called upon to weigh evidence, to balance pros and cons, then to act, we see the extent to which the relationship among ideas must influence conduct. No matter how much a man may know, if he cannot think of it when it is needed, if he cannot mass it quickly against a temptation, or if he cannot have the benefit of it all in passing a judgment, he practically knows less and is a weaker man than he might be.

School education can help to remedy that defect. Since the rapidity and completeness of the reproduction of ideas are known to depend upon the closeness of relationship among them, upon the extent to which they are built into chains, or series, or networks, one of the first duties of the instructor is to weave the knowledge that he imparts into one web. Thereby character is greatly strengthened.

(2) The apperceiving power of the mind is also involved in such a step, for a full command of one's knowledge is necessary for quick and accurate comprehension of new ideas, as for speedy and safe action. It is the simple law of apperception that is here involved; any thoughts that are to be appreciated and become influential must be met by related thoughts already in consciousness; as in the previous argument, the more numerous and the more closely related, the better. While this is plainly a weighty matter, the general argument in favor of the assertion is so similar to that immediately preceding, that extended discussion is unnecessary. Whether one is resisting temptation, is acting in a business capacity, or is acquiring new knowledge as a student, he is in every case merely acting under the affuence of his assembled past experiences that bear on the subject in hand; they tell him what to do and how to interpret.

The far I have attempted to show that strength of character and apperceiving power are greatly augmented by linking one's thoughts together into series or



thought complexes. There are several other important advantages resulting from the same means, which should be classed with the two above named; they will be next considered.

(3) Deep, permanent interest in the subject matter of instruction is directly dependent upon the number and closeness of relations into which thoughts enter. When they stand isolated, they are powerless; but when united into groups or series, or when built into a system, they may become a source of inspiration. Witness, for example, the system of philosophy of Aristotle or of Leibnitz; or the system of pedagogy of Froebel and of Herbart. Even those who can not accept the doctrines of these men are still often intensely interested in their teachings. The beauty of connected thought, of system, tends of itself to win converts. One reason why kindergartners are so much in love with their work is that they are inspired by Froebel's system of thought. Very often it is this system which has first aroused them, and which has attracted them towards children. More than that, their daily teaching is especially inviting to them because unity is their watchword and the several lines of work contribute towards the development of a central thought. On the other hand, teachers are usually so lukewarm towards their profession largely because they possess no systematized knowledge in regard to it, and their daily work tends to build up no unity of thought in the minds of their pupils. The same faults characterize Sunday school teachers in even a more marked degree. Knowledge that is in a chaotic state can never be a source of great power; it is much rather a cause of depression and discouragement. Relation: ships are the richest part of instruction. They can never be entirely omitted in teaching any fact, but unless they are definitely planned for and kept in mind, most of them and the best of them are overlooked. The continuity of thought secured by the gradual unfolding of a subject is so conducive to intense interest that it should be aimed at not only in the development of a single recitation, and of a single study, but also in the development of the curriculum as a whole.



Close relationship between studies and lessons not only increases the general interest in instruction, but tends particularly to correct two grave and common faults in teaching. One of these faults is the indifference of children at the beginning of recitations. If, in teaching a single study, there is never any detached part, if all that is learned forms a coherent whole, the progress is so natural and gradual that the pupil is likely to anticipate, at least dimly, what is coming. Then the most favorable state for apperception is attained, i.e., that of expectancy: then related ideas are massed for the quick and hearty reception of new thought. and the scholar approaches whatever is offered him with a feeling of interest. If the several studies, like the parts of a single study, stand closely connected, a similar advantage is gained and for the same reason, i.e., they lead to one another and serve to introduce one another. Ordinarily when a pupil passes from one recitation to another he breaks off abruptly from one line of thought to take up another not connected with it. Nor is he gradually led into the new feld; he is supposed to spring into it. But in reality he fails to do that because it is impossible. It requires time to recall previous related knowledge or experience. and until that is done, he is at best in a state of partial addifference to the new lesson; he lacks motive for going to work. Thus it happens that the beginnings of recitations are the weakest portions of good instruction, the minds of pupils not then being on the alert, while the closing moments are among the best, because their minds are then at a high tension. Any plan that would secure greater tension, greater momentum of thought, at the very commencement of the hour would prove an invaluable aid. The close association of studies tends strongly in this direction; if they were so arranged that one was a continuation of another by presenting additional facts, or familiar facts in a new guise, the desired attitude would be attained.

In regular school work it is not usually possible nor demable, perhaps, to pass from our subject to the next in just the manner described in examples, but an approach to it should be made. The actual practice of many schools

is revealing what can be accomplished along this line. For instance, during the winter term just passed, a certain fourth grade was led through the study of Indian Myths in Literature, to take up India as a topic in geography. In this latter subject important animals and plants were necessarily mentioned, but nature study directed attention particularly to the camel, the elephant, and the poppy; also glaciers were a topic in this branch, being studied in connection with the Himalaya mountains. For the arithmetic. more problems than were wanted were suggested by the movements of glaciers, the burdens of the camel, his rate of travel, the relative ages of camel and elephant, etc. The reading consisted of extracts from books describing Indian life, and the language reproduced, in written form, thoughts presented by the several studies. In this case, while no subject stood isolated from the others, the parts of a single day's instruction were not so directly connected as in the kindergarten. That is, after glaciers were once suggested by the geography as a suitable topic in nature work, attention was held to them until they were finished as far as was intended, although the next day's geography might suggest another good topic. But the fact that the parts of the curriculum were closely related, prevented the feeling on the part of the pupils that at the beginning of each recitation period they were entering a wholly different sphere of knowledge; it was much easier, therefore, to make the transition each time and concentrate the attention on the new matter quickly.

The second serious error, referred to above, that is remedied by having a close relationship among studies, pertains to reviews

It is a very common practice to set aside a few days during the term, or perhaps two weeks at its close, for review work. The colleges, Normal Schools, High Schools, etc., in which that has been the custom, have made no pretense, usually, of offering fresh thought to students on such occasions; the work is too hurried for that, it is not even as thorough as it was the first time the ground was covered. In consequence, the *memory* of students rather than their

judgment has been tested. But such work is necessarily dull. The seriousness of the fault has been suggested by the noted German teacher, Dorpfeld, in his remark that the next important book on pedagogy should choose reviews for its theme. Nothing is better established than that reviews are necessary, but they should appeal mainly to a student's thinking capacity rather than to his memory. Mere repetition unaccompanied with lively thought fails even to impress the memory with force. Real thinking is secured only when there is sufficient novelty in the ideas presented to furnish a motive for mental alertness. Hence new standpoints are in constant demand from which to view old or partially familiar facts. It requires much thoughtfulness to discover such standpoints. But when studies are brought into a close relation with one another, they are mutually suggestive; indeed each, as it is approached, not only allows the review of others, but it often demands it. Such review work is not then undertaken for its own sake as are the above-mentioned term reviews -but because it is needed for the better appreciation of what is to follow.

For example, the study of the Himalaya mountains, the Sacred lakes, and the Ganges river, necessitates some review of the religious views of the Indians as taught in the interature; problems relating to the movement of glaciers involve a review of the scientific facts in regard to them. Such reproduction may often form the most fitting approach to the work in advance, and even the pupil may feel the need of it. That is the incidental review, the most valuable kind there is. Nor is it a mere repetition of ground previously traversed. Since each study possesses a distinct individuality, its way of reviewing a topic taught originally under another head, is peculiar to itself; its standpoint is different from any before taken; thus whatever is reviewed is looked at in a new light, and that novelty, which is the condition of mental alertness, or interest, is secured. Let us give a detailed illustration:

Suppose a class of six-year-old children have gathered, as a part of their nature study, several kinds of leaves in the fall. A review of those leaves at a later time merely

for the sake of repetition would lack force. But there is a story called "The Discontented Pine Tree," that is often related to first grade pupils. The tree was discontented because it did not like needles for leaves. Imagine the tale introduced in the following manner: "We are going to hear a story about a little tree that did not like its leaves. Can you tell me of some trees that certainly do like their leaves?" "Yes, the oak, maple, etc." "Why do you name those?" "Because we gathered those leaves." "Will you name for me all the kinds that you have collected this fall?" "Why did you choose those?" "Because they were pretty." "Do you think of any tree that you slighted; one whose leaves you never thought of calling pretty?" "Yes, the tree with needles," "How do you suppose it felt, then, when it saw that its leaves were so different from those of other trees, and that boys and girls passed it by?" Then follows the story. In such a case as this, children are reviewing with a purpose; hence, they are awake. The standpoint is new. too; for before they probably dwelt mainly upon the shape of the leaves, or upon their beauty and their names; now they are required to consider how the trees themselves feel toward their leaves, especially the pine. In that kind of review the conditions are favorable for mental exertion. The same conditions are fulfilled when the instructor begins the study of New England in geography by recalling as many historical facts as possible about its connection with Old England, i. e., the study of the Pilgrims, of John Smith, the reasons for the names Plymouth, Cambridge, New Hampshire, New England, etc. With careful planning for concentration, fixed periods for review would become nearly unnecessary: reviews would be incidental, i. e., would take place from day to day as they were demanded.

Thus the establishment of a close relation among the studies increases interest in general, since related ideas are always more attractive than those comparatively isolated; it provides for a fair degree of mental tension at the beginnings of recitations, one study in which interest has been aroused serving as an introduction to another, and in place of those dull reviews that are undertaken for the sake of

repetition, it makes possible the substitution of the incidental review.

(4) Thoroughness of knowledge is also directly involved in concentration. This is evident when we recall the fact that thoroughness is the result largely of numerous natural and intimate associations, and it is just such associations that concentration is endeavoring to establish. Thus far it has been necessary to assume that the several studies bear a close natural relation to one another; the subject will be a topic for special consideration later, but at present that must be granted. If the assumption is correct, any isolation of studies tends to exclude the light which they are fitted to throw on one another; while any endeavor to associate them is an attempt to secure several standpoints from which to view each fact learned. One reaon for having so many studies in public schools is that they may explain one another. When a classical poem treats of an event that the history has already handled; when the geography produces a vivid picture of the country m which the event happened, and the nature-study describes the fauna and flora that are characteristic of that country; when the written language work is a composition on the traits of that people, and the art reveals their peculiar æsthetic tastes; when all the subjects, thus associated, present different portions of one large picture, the result reminds us both of what instruction can accomplish, in regard to thoroughness, and also how much it usually fails to accomplish. We are prone to forget what is meant by thorough knowledge, and how superior it is to that which the schools usually impart. Anyone knows that a mountain does not present the same appearance from one side as from another, and that he who has viewed it from one standpoint, even on a very clear day, may not recognize it at all when seen from another point. The same is true of learning. Since it is only that knowledge which we have seen from many or all sides that is our own, to such an extent that we can use it, it should be one of our leading objects to find numerous positions from which to look at each thing we learn. The different studies will furnish these various positions, provided they are carefully arranged with that end in view. But unless that precaution is taken, we in reality fail to learn what we are supposed to master. Most children would not risk a meal on one fact in ten that they learn in school. Many adults, on beginning their life work, are conscious of throwing overboard most of their school knowledge and of finding only a few things that they are certain of and dare build on. Felix Adler in his Moral Instruction of Children remarks that a little knowledge thoroughly understood is like a tower of strength in an enemy's country; from it one can sally forth into the surrounding territory and, in time of danger, can retreat to it as a place of safety.

The incidental reviews previously discussed tend to secure this desired thoroughness by approaching each subject through the related ideas on other subjects. Such review work is not primarily repetition, but it is the reconsideration of points from a new position; what can better secure correctness and certainty of knowledge?

Four reasons have now been urged in favor of concentration, namely, it tends to increase strength of character, apperceiving power, interest in studies, and thoroughness of knowledge. There are still two reasons more that will be presented.

(5) The first pertains to the overcrowding of the curriculum. Within a short time the common school course has increased from the three R's to ten or twelve studies. There is danger now lest children may be stifled under the mass of information unloaded upon them. But each study has its strong champions, and besides there are convincing reasons for teaching each. Where, then, can a limit be drawn? Evidently there is need of a supplementary standard of values in the selection of subject matter. The purpose of the school is the primary standard (granting, of course, that only that is chosen which corresponds to the nature of the child). Various lines of work are important according as they aid toward the fulfillment of that chief object. But after it is determined that certain studies shall constitute the school course, because of the peculiar contribution of

each to this main purpose, there is still the question continually arising, "How much shall be chosen from each, and what shall it be?" The principle of concentration helps to answer this question in a simple manner by ruling out irrelevant subject matter, and by attaching special importance to whatever is naturally related to other subjects. Text-books are constantly misleading teachers in this matter by offering non essentials, or facts that are likely never to become links in any chain of ideas in the pupil's mind.

For instance, the names and deeds of many early explorers presented in our United States histories can never become a part of any series, but must remain isolated facts until lost from memory. Some of the wars, as King Wilham's, Queen Anne's, and King George's, are treated in the ame faulty way, and hence fail to become a part of any thought texture. Geographies show the same defects to a more striking degree, because chronology and the causal succession of events seem to give history a special advantage. Most of the geographies now in use attempt only to uring facts into lists and not into series. It is evident that, from the standpoint of concentration, the plan of many text books is unsound. But a clear understanding of this principle helps to make the teacher the master of his textbooks rather than their slave. It cautions him frequently to be hold enough to omit portions of a book entirely and to supplement other portions in such a manner as to tie together facts that would otherwise remain separated. Thus concentration influences instructors to reject much that is boally taught and to organize whatever remains. It also helps to make a certain kind of long explanatory introductions to new subjects superfluous. For instance, when the branches in the curriculum are closely associated, Paul Revere's Ride might be introduced by the history that preceded it. But if it happened that such a poem were chosen without reference to the history, or even in advance of it, it would be necessary to occupy a portion of the reading time in an explanation of the condition of the country at that period. Many of the selections in our school readers must be so handled. It is the case still more in composition work.

There, much of the time which should be devoted to actual composition is nothing more than a study of science, or of history, or of literature. If it were fully recognized that language study should draw its material from thoroughly familiar sources, this time might be largely saved. Geography frequently requires introductory explanations from nature work, or vice versa, and so with other subjects. Now it is granted that the explanatory introductions which one study can furnish to another, are often necessary. Indeed, this article has argued that they are highly desirable, but The introductory discussions just not all kinds of them. referred to above deal only with strange subject matter and the work is hurried. In order to secure a fair appreciation of Paul Revere's Ride historical facts would be related in a few minutes that would ordinarily require several days. Such explanations are advance work that must be acknowledged to be superficial and repellant when so hastily done. The advantage of a careful correlation of studies is that such advance work is converted into reviews; instruction that was repellant is thereby made attractive, all the advantages of incidental reviews are then gained. Of course, too, if the introduction to a topic is review, the progress to the new points is much more rapid; more time must remain, then, for these points themselves. Thus, again, time and effort are saved.

(6) The sixth and final reason to be urged in favor of concentration is that through it the memory is greatly assisted. Strictly speaking there is no such thing as a certain faculty called memory that is equally retentive in all spheres of knowledge, and that can be strengthened alike in all spheres through exercise in only one. The ability to reproduce ideas varies in the same person; in some directions it may be very strong, in others quite weak. Much drill may help in that line of thought in which the drill takes place, but it can accomplish little or nothing beyond it. Whatever one's native endowment in regard to memory may be, instruction is dependent mainly upon two means for its improvement; i. e., it can, with care, increase the vividness with which impressions are received, and it

can relate them more intimately with one another, thus assuring their more frequent reproduction.

Correlation of studies tends towards the accomplishment of both of these ends, for it increases the depth of new impressions by making them more interesting when they are first approached; and its avowed object is to tie deas together. Other things being equal, the chances that any fact enjoys for being recalled are proportionate to the number and closeness of these ties. But since correlation helps not only to increase the interest in thoughts when arst received, but also to engender a deep, permanent inlerest in the same, it furnishes a special motive for recollection We do not ponder what we do not care for-why should we?-but whatever has aroused feeling is likely to be pondered often. If the feeling belongs to the whole group of notions instead of a few members of it, the reproduction of any one of them is likely to usher in a good part of the whole train, one necessarily bringing those others into consciousness that are bound to it. Association of ideas has long been recognized as intimately related to memory training: indeed mnemonic systems have been based mainly on laws of association. Their weakness has consisted in the fact that they relied too much on artificial, and hence uninteresting associations. Proper correlation is attempting to accomplish their object more effectively by cultivating a love of vital relationships.

III.

The chief reasons in favor of concentration, or of unity of aleas, have now been presented. It should be remembered that the unity here in mind is by no means the philosophical, but the psychological unity. The notions that the world is governed by law and that there is one higher law, or a Law Giver, and that consequently there is entire harmony in all events, etc., are ideas that can be realized only dimly by philosophers. But many spheres of knowledge necessary to the comprehension of the universe the schools will never teach; hence all that they can aim to do is

to secure a fair degree of harmony and relationship among these fragmentary ideas that do fall within the range of in struction.

IV.

If the reasons advanced for such psychological unity are sound, efforts should be put forth to establish proper connections among studies. In so doing there are two points to be kept in mind; first, the succession of studies in order of time, so that the work of any week, or term, or year may lead to what is to follow; and second, the relation of studies at any given time so that any single branch may be intimately associated with one or several of the others. In the first case the longitudinal connection is the matter in hand, in the latter the transverse. In this paper very little will be said about the former, since it involves a lengthy discussion of one of the leading principles of education, i. c., that of the culture epochs, and is a fit subject for a monograph in itself. The attention will be directed, therefore, to the relation of the parts of any cross section of the curriculum, not primarily to the relation that these parts bear naturally to one another, but rather to that which the learner, the child, comes to feel that they bear: this distinction is very important.

Before considering any plans for concentration, however, this question of the natural connection among studies must be satisfactorily settled. There is no wisdom in trying to make the child feel a relationship that does not really exist; the extent to which it exists will determine the extent to which correlation might be carried. Thus far it has been assumed that the relation existed, and to a considerable degree, too. It is in place now to point it out more clearly.

All studies are aiming to make children acquainted with rules or laws, and the comprehension of these latter is in each case fully based on the past experiences of the learners. Here are two important points of similarity among studies, which signify a certain kind of relationship or unity among

them. But it is a kind that is of comparatively little profit in this connection, for it pertains to the philosophical rather than the psychological unity, matters which were briefly discussed above. What we desire to know is whether or not there is a natural relation of the content of studies. The reply is. Yes. It is an established fact that about one-half of our school work, i. e., beginning reading, writing, spelling, grammar, music, number, modelling, drawing, and painting, is by nature dependent upon the other half for its motive and force. When taught independently of other subjects, these are dead; but when introduced in close conacction with those branches containing rich thoughts, the interest that these latter excite arouses interest and motive for the former. In other words, the form-studies are necessarrly dependent upon the thought studies. This is evident from the fact that the form studies deal primarily with expression of thought, rather than thought itself; they would model or paint or draw, or describe by words whatever has aroused enough interest to seem worthy of such treatment. Their subject matter might be drawn from outside experiences of pupils instead of from other school work, but that would sti., declare them dependent studies, since they would be mag beyond themselves to get thought to express. It world often mean, also, a loss of time and interest, since ideas that have already been more thoroughly digested are found in abundance among the thought studies. This dependence, though, is not confined entirely to one side. While the thought studies suggest the material on which the form studies are to work, it is a favor that is asked by them Tather than a command that is given. Nature work itself 6 incomplete unless animals and plants are drawn and painted; thoughts of literature and history are hazy and disorganized unless expressed clearly in words; the facts of wience and size, distance, etc., in geography are little appreciated unless the relations of quantity as treated in arithmetic have been well taught. One of the most striking lacts in modern pedagogy is the growing conviction that thought must find numerous avenues of expression, such as writing, drawing, painting, etc., if it is to be clear and

accurate, and that any profitable expression of thought presupposes as a real necessity the presence of intrinsic thought to express. Hence the vital relationship between the two parts of the curriculum, the form and thought studies, is an acknowledged fact.

The next question in this connection is the extent to which a natural relation is found among the thought studies themselves. No one will deny its presence between literature and history, on the one hand, and geography on the other; or between geography, on the one hand, and the sciences on the other. The relation of literature and history to the sciences is not so close, perhaps, but it is still present to a great degree. The interdependence among the sciences themselves is striking. Formerly each was taught separately because it was seen that its parts were closely connected. But in botany the relationship of one plant to another is mainly structural, while that between botany and zoology is causal. Similarity in structures is by no means so attractive, so stirring to the human mind, as the causal idea; hence here the relation between two studies is closer, even, than that between the parts of either. Accordingly some of our best high and normal school teachers are favoring a study called biology instead of the two separate ones called botany and zoology. Physics, and likewise chemistry, are closely allied with the other sciences, since the laws that they teach find their illustrations in these other subjects. Among children there is much the same reason for associating physics and chemistry with other lines of work, as there is for connecting language lessons with the thought studies. One of the most influen tial German books on science instruction, i.e., Finger's Dorfteich, advocates a village pond as the subject of study, and as much of botany, zoölogy, physics, chemistry, etc., as is necessary for the appreciation of the community of living things that inhabits the pond. By that means all of the science that one learned would compose one body of knowledge, and the interdependence of facts, which is the most interesting part of such knowledge, would receive due recognition.

The conclusion of the whole matter is that the several studies are naturally closely related to one another; not each one directly to all of the others necessarily—I have made no attempt to prove that—but each one to one or several of the others, so that it is unnatural for any branch to occupy an isolated position in a teacher's plan of work.

V.

We see now the importance of related knowledge and the fact that there is a close natural connection existing among studies. It remains to so plan the curriculum that, when a proper method is employed, this connection will exist also in the child's mind. Good method alone can accomplish much in this line, but a careful arrangement of the curriculum may be a very great help in addition.

Much contention has arisen at this point, because some of the advocates of concentration have argued the necessity of subordinating some studies to others, letting one form a center about which the rest shall be associated; while others have maintained that they should remain on an equality, and hence have preferred especially the term coordination of studies as the name of this topic. The problem is not new by any means, and the experience of the past can throw some light upon it.

Among the humanists the classics were the leading subjects of study; for centuries whatever else was studied was associated about these as a center. At the time of Sturm, Latin especially was the favored branch. But the ideal education of those days covered a very narrow range of knowledge, and it was owing rather to this extreme nartowness than to systematic effort, that those difficulties were partially avoided which concentration attempts to overcome. Ratich wished to prevent too much scattering by teaching only one thing at a time; "one study after another" was his motto, meaning by that that one should be mastered before another was taken up. Jacotot taught that we should "learn something thoroughly, and refer everything else to it." For instance, when Telemachus is the something that is thoroughly learned everything else should be referred to it; it can scarcely happen, says he,

that a single reflection can come to view which cannot find some point of similarity of connection with those already remarked in the pages of Telemachus. In this sense "one book contains all books," or more generally "all is in all." Now and then there has been a determination to make one book, as the Bible, and later the school reader, the center for all study, or to associate all work about the mother tongue, as at one time in the German common schools. In this country those who have been laboring on this problem during the last six years have usually made either literature or history, or geography or science the center; some, however, have had two or three centers, having divided the curriculum into two or three groups There are those, also, who have tried to relieve their minds of the problem by declaring the child the center, or even the teacher himself. On the whole, therefore, the past tells us that it has been difficult to attempt any solution of the question without selecting a center of some kind and subordinating some subjects to it.

VI.

The cry that the teacher should be the center is a mere evasion of the question, for the point is to establish in the child's mind a close relation among the contents of the several studies. The teacher can be the instrument in helping to point out this kinship, but since the subject matter of the studies is not directly related to him, he would form a a very artificial center about which to associate them.

The declaration that the child should be the center results from serious confusion. The law of apperception makes the child the center of all instruction, i. e. all new knowledge must be tied to what he has already experienced in order to carry any meaning; these past experiences, in fact, are what is here meant by "the child." If the principle of concentration were to affirm the same thing, it would be a mere repetition of what is accepted in the law of apperception. There would then be no use for the term concentration, and it might better be thrown away. But it stands for a definite idea, one that is subordinate to the law of apperception and that helps to apply it.

Often a lecturer presents to an audience numerous facts that are good in themselves and easily understood, still they fail to exert a combined effect. Likewise valuable facts in history and geography may be well understood and thoroughly committed to memory, and still result in nothing. For instance, many a student can give glibly the dates for the admission of the states into the Union, but that knowledge is a dead weight until some additional. rivifying thought ties these dates together. That thought wat hand when it is discovered that states entered in pairs. anorthern one and a southern one at a time, on account of the slavery question; there is suggestion in that. The first fault in such lectures and studies is want of arrangement of subect matter so that relations can be quickly seen; when that defect is remedied apperception is much more complete. Concentration is endeavoring to so arrange the parts of the curriculum that their relations to one another may be more apparent to the child. In order to accomplish this work with lectures and single studies it is necessary to debermine the leading line of thought, the leading events in them, and associate the rest about them. It might be feasihe to arrange the course of study in the same way. If that were done, it would not mean a denial of the statement that buld is the center of all instruction; it would be an demonstrated that he is the chief center since the curnet om is so carefully planned for his benefit. But concentration provides for a center of another kind so that he may let the full benefit of the instruction.

Concentration deals primarily with the relationship of the studies to one another; apperception with their relationship to the child. But concentration is an important matter because if it is properly planned, apperception may be much more complete. A recent book on concentration which has had wide circulation represents the child as the hub of a wheel, while the spokes stand for the shoot studies. The diagram is entirely out of place for a book on concentration, but it would fit exactly for one on apperception. If the hub were made to represent the entral study or group of studies instead of the child, and

the spokes the other branches, it would be more nearly correct, although even then it would fail in some very important particulars.

Some teachers who reject the idea of a center, favor bringing the studies into two or three or four groups. In so doing they recognize the great need of related thought, but they refuse to apply the principle of concentration fully, because they believe there is a want of inner connection among the groups, and they are opposed to artificial connections. For instance, Voight, a German writer, would make literature and history one group, the sciences a second, and the arts a third. But, as has already been pointed out, the arts are by nature dependent upon other studies for subject matter, while the relation between the sciences on the one hand, and literature and history on the other, is by no means distant. DeGarmo, in his chapter on Coordination of Studies (in his recent book, Herbart and Herbartians), divides the curriculum into cores or groups, i.e., the humanistic, economic, and scientific cores; literature and geography being the subjects which best bind them together. Thus he allows groups but asserts the existence of a close relation among them.

However, he refuses to subordinate any one group to the others, and hence employs the term coordination in place of concentration. His plan would meet the approval of many teachers, could it be carried into practice, for there is naturally strong opposition to the subordination of some branches to others. But I do not see how his plan can be realized. When he has shown clearly the close relation among these cores -through the aid of literature and geography-he stops short as though he had solved the problem. The fact is that he has only just reached it; it begins where he leaves As already once stated, the problem is primarily not to show that the studies or groups of studies are naturally related to one another, but to show how the relationships that do exist can be established in the minds of pupils. The relations have always actually existed as they do now, but children have not discovered them; teachers even are only just finding them out. If the matter is left to accident,

nothing more will be accomplished than in times past. Evidently some careful planning of the course of study is necessary with reference to this end. In executing such a plan part or all of the subject matter in one branch must be selexted before that in the others; it could not be otherwise. When that has been done, for instance, when Germany has been determined upon as the topic in geography, the choice of matter in at least some of the other studies must be induenced thereby, or there is likely to be very little concentration. Likewise, if germination is the chosen subject in nature work, and the reading is to be closely allied with it. the selection for the latter is predetermined within narrow Certainly it is evident, that some subjects must be planned with reference to others if the best relations are to be revealed to children; and it is the best, that we are seeking. There must, then, be a subordination of some studies to others.

In addition to that, when it is recalled that one-half of the subjects, i.e., those dealing primarily with expression of thought, is dependent upon the other half, i.e., those aiming primarily to furnish thought, the impossibility of securing a coordination of studies is evident. Both the history of attempts at concentration, and argument as well, favor the authordination of some branches to others in order to secure the closest connections. They favor also the association of the subordinate subjects about a single one, or a group, ava center. However, those who are engaged in the actual application of this principle do not understand that the relation of the spokes of a wheel to the hub is exactly the same as that of the dependent branches to this center. The spokes radiate directly from the hub, and have nothing to do with one another; but any attempt to make all of the studies directly dependent on the center alone would at times prove very artificial. If history were the central line. it might suggest the geography, the latter the sciences, the mirrors the reading, etc. This was the case in the example in regard to India, drawn from a fourth grade and given above. The reading might properly be suggested by any other branch in the curriculum; science might be suggested by geography, literature, or history, etc. There are several relations each time in which any branch might stand to the others, and it is the instructor's duty to choose that which promises to be most fruitful. It is in this sense that concentration is practiced by the Herbartians in Germany. If one is on his guard to use good judgment and to attempt no connection rather than allow an artificial one, much good may result. No complete unity would thereby be established in the multiplicity of things learned, but mainly serial instead of isolated thoughts would be in possession of the learners, which is an approach towards the psychological unity desired.

One could properly ask why there should be one center at all; why not shift about, relating the studies to one another as seems fit? If that were carefully done, it would be a great improvement over the present isolation of studies; but such a plan as that acknowledges one or more centers, only they are shifting ones. Now one study is in the lead in giving suggestions to others, then another. It is a manifest advantage if one line of thought, and that the most important one in the curriculum, is held steadily in mind as the central core, and the others are generally associated about it, either directly or indirectly; it would resemble somewhat the trunk of a tree, the other subjects being the branches directly or indirectly connected with the main stem; the unity of thought would then be more nearly reached.

VII.

The common objection to concentration, that it causes the individual studies to lose their independence, and hence their unity, is worthy of careful examination. Specialists in instruction are most active in support of this objection. It seems odd that concentration should fix unity for its avowed purpose, and then be vigorously combatted on the ground that it destroys it, yet that is the case. The matter stands so: the specialists are laboring to preserve the unity of the individual subjects of study, the concentrationists the unity of thought in the child's mind. Or (stating it

differently, since the thoughts in each study become through instruction a part of the child's thought), the specialists are endeavoring to make the content of each study a unit in the pupil's mind, there being as many units as there are studies, while the concentrationists are endeavoring to build up only one large unit, the several studies being its parts. There can be only one principle on which both sides base their argument, namely, that related thought is most valuable. If that is true, only one side can be right, in the main. If it is important for the child that the ideas in a single branch be related, it is still more important that those in all the branches be brought into close connection, as far as the principle is concerned. The specialists defeat their aim in setting up their defense. Unless both objects are attainable-and that seems impossible-the specialists are the first who should be ready to make sacrifices. They must weld to some extent in order to secure this higher unity. just as the individual states yielded some of their peculiar rights for the sake of the higher unity, the central government.

It has so long been the custom to regard the separate branches of study as the highest units in instruction and to overlook the unity of the curriculum as a whole, that in this discussion persons are likely to overestimate the degree of unity actually found within each study. Each subject represents a distinct field of work; it has individuality, that is why it is given a separate name; therefore peculiar ights belong to each. But that is no proof that it is composed of an organized body of knowledge which, in order to be appreciated, must be unfolded logically, or at least in one unalterable sequence of topics. In the first place, few, if any, of the school studies contain well organized bodies of knowledge, i. e., they are not sciences; and even If they did, they should not, as a rule, be unfolded logically or even in an unalterable sequence. The statement that they are not sciences is scarcely disputed. Probably grammar and arithmetic approach that state most nearly, but even in the higher grades their scientific aspect is expected to receive little attention. However, even if they were all sciences, the logical order of their development is not to be recommended, because the logical order is not usually psychological, or pedagogical. Formerly text-books on zoology began with the highest forms of animal life and proceeded by careful gradation to lower forms, or vice versa. They did so in order to be logical. With the same object, probably, etymology was fully taught before syntax was begun, and common fractions preceded decimals, these came before percentage, etc. But the logical order is naturally poor because it is determined without reference to the apperceptive power of children; hence it must yield to the psychological or apperceptive order. This fact makes concentration at least to some extent possible. If each branch were composed of a system of thought that could be approached by only one narrow road and whose parts must be viewed in one unchangeable sequence, there would be no room for concentration at all. The latter seems lim ited, therefore, by the necessary sequence within each study, and it is important to inquire to what extent such a sequence is present. In beginning and advanced reading there is no necessary order of topics. It is approached most nearly in the first readers, where new words are very carefully graded. But the best teachers are now largely ignoring that precaution, and are teaching children to read by presenting to them in script and print a large number of thoughts, from any source, in which they have become interested. Reading offers no serious objection to concentration; on the contrary, it would be much strengthened if it were furnished a motive for taking up literary selections instead of following the order of the school reading book. There is some necessary sequence in geography, but not a great deal. The study of the child's own neighborhood must precede foreign geography, it being the basis of the latter. But there is as great variety possible in the order of topics, after leaving home geography as any good plan for concentration will require. Foreign continents and countries may be taken up in several orders almost equally well; likewise the order of industries and geographical types may easily be varied.

As far as nature study is concerned, it is a very common complaint among teachers that there is no necessary sequence in it, one topic suggests so many others that it is very difficult to choose. That study then would gladly welcome the suggestions for sequence that a good plan for concentration might offer. In language lessons there is no important sequence of topics that would conflict with a plan for concentration, and even in grammar proper, the parts of speech, etc., may be approached in several orders. A certain sequence is most obligatory in arithmetic, but since it is only the content of its problems that arithmetic will receive from other studies, and since nature study, geography, and history offer an abundance of such problems, this desired sequence is in no danger at all of being seriously interfered with. In history the facts are bound together by a causal connection and they can, as a rule, be best appreciated when studied in the order in which they unfolded. Sometimes it is helpful to go backward in time. rather than forward, in order to trace the development of a civilization whose attainments have been already treated somewhat fully. But that is an exceptional method; in general the chronological order of events is largely necessarv. It is evident, then, that if history were dependent upon other branches, as upon nature study or geography, for its topics, it might be greatly handicapped. The only condition under which it might receive no injury from concentration is that it be made the central subject and thus secure the leadership. Of all the common school studies history is the only one that is in any serious danger from concentration. It follows that the unity of studies is not greatly dependent upon the order in which topics are presented. Still some of them have a considerable degree of unity. In what, then, does it consist? It consists in the number and breadth of the generalizations in each subject and the intimacy of their relations to one another. metic and grammar are the most complete units in the curriculum because they each culminate in a system of laws Elementary science is a unit to the extent that it leads to laws that are interdependent, and the same is true of other studies. In each case the final unity reached depends not so much upon the order in which the concrete data that reveal the laws are taken up, as upon the comparison and classification of these data after they have been once collected. For example, if science is dealing with the law that animals mimic the color of their environment for protection, the in dividual facts that prove the law should be classed together as they are gradually secured. Meanwhile the collection of the data necessary for other laws may be going on without impairing the unity of the work. Indeed, that is probably the most profitable manner in which to conduct that study. And this is true of the laws or generalizations in reading, geography, history, etc. It is seldom the case in any subject that one generalization can be approached inductively and fully established before another is begun. Unity and system are very much dependent, therefore, upon the comparisons and classifications that take place in each study; they are not entirely dependent upon the order in which concrete data are approached.

However pedagogy has not yet fully revealed the laws that each branch should teach, as history, for example, so that even the better teachers are often giving instruction without much thought of law. To them the unity of any study refers chiefly to the closeness of connection between any topic and that which immediately follows it; they are unmindful of the unity of the large divisions of each branch. Concentration seems objectionable to them because it interrupts this connection, although the latter is often in reality not a real connection but only the routine to which they have become accustomed. In such cases it can perform a very good service. On the other hand, it could favor a ceaseless springing about, a careless teaching of many subjects without a thorough handling of any; it could then prove decidedly harmful. Some earnest teachers take their flight to the old routine at sight of this danger. But much fear and hostility may be overcome if it is always remembered that frequently there is no close or interesting association between a certain topic in a given study and the one that has preceded it in that

branch; that, on the other hand, there is often an intimate relation between that topic and something which has preceded it in some other study; that concentration merely endeavors to introduce this topic through this more intimate association, and that it would plan such a step not every day by any means in most studies, but only from time to time as comprehension and interest would plainly be increased thereby.

Much of the umbrage that concentration has produced is due to a misunderstanding as to this last remark, i. e., the frequency with which one study might interfere with the progress of another. To illustrate, the history of the explorations of Father Hennepin on the upper Mississippi ower might suggest the northern states as a subject in geography, and Minnesota might suggest wild animals and wild rice as topics in elementary science. Then, no matter if the history led elsewhere, as down the Mississippi river or across the Rocky Mountains, the study of these northern states and of the science topics should be continued until they are finished. Suppose that required two or three weeks' Even then there is no need of returning to the history for suggestions of further topics, if either of these has excellent suggestions of its own to make. Thus it should arways be, if the connection of a series of subjects within a single study is very close, that series might be followed: it is only when that series is not a necessary one, or can not be appreciated by pupils, or has been followed so long that its relation to others is being forgotten, that suggestions from outside studies need be accepted.

It is sometimes urged against concentration that it merely does away with individual studies, allowing almost everything to be taught within each recitation period. For instance, a fact in nature study might remind one of a poem, which would suggest an historical fact; the latter might recall a certain theme in geography that necessitated the solution of a problem in arithmetic, etc., etc. Thus nothing definite in any one sphere would be mastered in one recitation. It is perhaps needless to say that concentration does not advocate such treatment of studies. While the

portions of knowledge that a student acquires should be related, each branch should finally stand in his mind for a distinct and definite field of learning, and in order to do so, it must become enough isolated from other fields to be viewed alone. To that end a regularly recurring recitation period must be set aside for each branch. No study dare be left entirely to accident, nor can it be properly mastered through incidental teaching alone. There is nothing in concentration to prevent this separate treatment and isolation of studies. Concentration merely helps to provide for an excellent INTRODUCTION into the parts of a study, it secures interesting approaches to them; after this introduction through another study has taken place, they may be isolated and viewed by themselves as much as one pleases; and that should such isolation, i. e., by making long explanatory introductions unnecessary.

Through the close relation among studies that it establishes, the needed introductions become mere reviews; little or no part of the hour is occupied with explanatory remarks about strange subject matter belonging to other fields. Hence time is saved at the beginnings of recitations, and in consequence each recitation period may be more fully a history or a literature or a geography or a science recitation than would be possible without this close connection among studies.

Summing up, the reply in brief to the objection that the separate studies lose their individuality and unity by concentration is as follows:

- 1. The studies of the common schools are not thoroughly systematized or unified bodies of knowledge, *i. e.*, they are not sciences.
- 2. But even if they were highly developed sciences, the logical order of their unfolding is not in accordance with the law of apperception, and hence must be rejected as the principle of their sequence
- 3. Whatever unity each study possesses is dependent for appreciation upon the laws that it reveals, rather than

upon the order in which the concrete data are presented that lead to those laws.

- 4. As far as the concrete data are concerned, the central study is not expected to change the subject matter of the dependent branches daily, but only from time to time, when there is poor sequence in the latter, or at least a need of such help as the leading subject can give. Hence concentration allows such sequence within each study as is likely to be necessary. History alone might suffer seriously were it made a dependent study.
- 5. Concentration not only does not oppose, but it directly favors, the teaching primarily of one subject during each recitation period, thus securing the necessary isolation and preserving the individuality of each.

VIII.

The final question for consideration involves the choice of the proposed central study. It is naturally a source of much dispute, for some teachers are showing a preference for nature study as the center, others for geography more particularly, and others still for literature and history. The answer is important, for upon it depends to a considerable degree the value of the curriculum as a whole. Whatever is selected as the central sphere of thought will be made especially prominent thereby, since it will be frequently referred to for suggestions in the selection of subject matter in other branches and for the introduction into it The highest ultimate purpose of instruction must be a factor in solving the problem, for it is not the object of concentration merely to secure a lot of closely connected ideas: its end is first of all an ethical one, hence it is striving to establish such a network of ideas as shall place special emphasis upon those thoughts that most deserve it. The ultimate aim of the school is the development of good character; the child should be influenced by instruction to view the whole world from an ethical standpoint. The stady that tends most towards the attainment of that high purpose has the most valuable content and should be awarded the most prominent position. But which one is it? In short, which one has the greatest ethical worth? The choice lies plainly between literature and history on the one hand, and nature study on the other. Probably a majority of educators unhesitatingly say it is the former. Nature study directs attention to the work of God about us, leading us to enjoy it, to wonder at it, and to reverence the final cause of it all. But while it exercises this ennobling influence, it fails to affect character so directly or so forcibly as do literature and history, because it lacks the moral content of the latter. While these direct one's thoughts to Providence in fully as feeling a manner as does nature study, and hence have at least an equal religious value, they also deal with the deeds of human beings, with human motives, temptations, sacrifices, etc. Nature study does not teach what actions one should love and hate; it does not even deal with human actions, but with nature in distinction from humanity. But history and literature not only impart a knowledge of what is right and wrong, but they also instill a love of the one and a hatred of the other. They impart such knowledge through the presentation of human deeds that continually require judgments of approval or condemnation, and they engender such love or hatred through the strong feelings that are the necessary accompaniment of those judgments. These are the branches that are most nearly related to the will, since strong ethical feelings are the chief condition under which ethical desires spring up, resolutions are formed, and maxims are established as the basis of conduct. It is right, then, that those studies that make man, and not nature, the center of thought, should be the center of the school course.

There is another potent reason for this assertion. Literature and history, because of their ethical nature, act as constant reminders of the great ethical purpose of school instruction, and the greater the prominence given to them, the greater the assurance that the chief aim of instruction will not be neglected. But is there usually any serious danger of such neglect? There certainly is. In many fields of labor people are prone to forget the chief thing that they

are striving for. For instance, instructors often drill pupils on the statement that "Grammar aims to teach us to speak and write correctly," then proceed to master the text-book without further bother as to the chief object of the study. Our normal schools are filled with students who have pracneed economy for years in order to prepare themselves fitly for teaching. They are frequently men and women of maturity in every respect. But in times past it has not been an uncommon thing to find them so interested in the marks that they received as to become quite oblivious of the real object of the normal training. What a pitiful perversion! Yet it is little worse than is common among principals and superintendents of schools. A very large majority of them today are interested only secondarily in the quality of instruction and thirdly in the development of good character. while their chief effort is directed to office duties, janitors, repairs, etc. If business men were as forgetful and waverng as to their leading purpose, they would inevitably end n bankruptcy. Teachers and students have, however, one excuse for this otherwise inexplicable tendency to forget their main purpose; it is found in the multiplicity of their ригровеь

The public schools are aiming at useful knowledge, good character, mental discipline, mental power, a many-sided interest, etc. For intelligent instruction, these aims should be ranked as to their worth, and the most important of them should be kept uppermost in mind. But it is obviously difficult to do these two things, and, in fact, it is very seldom done by our best teachers today. Any help in this direction night gladly to be welcomed. Our public schools being the safeguard of our nation, all possible provision should be made in order to keep at least the prime object of instrucbon -the development of character-continually before the minds of teachers. This is partially accomplished when literature and history become the central studies in the curneutum-literature during the earlier years of school before instory is taught, and history from the beginning of the fifth year on By being made the center, they are declared the controlling subjects; they must often be referred to for suggestions to other subjects; their contents must often be re viewed, and viewed again in new lights, as they furnish the introductions to topics in other branches. Hence constant prominence is given to them, special emphasis is laid upon them. If, now, this content is primarily ethical, if it is their peculiar function to furnish right ideals of character and to engender a love for the same, the ethical aim of instruction is, through them, kept ever in the front. There are conclusive reasons, therefore, for placing them in the center of the curriculum; they are superior in ethical value to nature study and they are capable of acting as constant reminders of the ethical aim of instruction.

There is a third important reason for granting to history that position. It has already been remarked that the order of topics in that study could not be greatly varied, and on that account it could not well be made a dependent study in any plan for concentration. But this seeming misfortune renders it especially valuable as a central subject. Since the succession of its events is a necessary one, it being determined by the causal relation, the study stands forth as one long closely connected series of ideas, and thus approaches unity. One serious fault with geography and nature study as central subjects is that they are too little connected within themselves; in neither is there a long continued necessary succession of thoughts; hence their own lack of sequence forbids their being chosen as unifying centers for the curriculum.

IX.

If the reasoning has been sound up to the present point, the only serious objection that remains to be raised against the proposed center is that it is not sufficiently associated with other studies. The abundance and closeness of associations are of vital importance. Geography is so strong in these respects that many teachers would make it the central subject; others prefer nature study on the same account. But for reasons already shown neither of these possesses either the ethical worth or the inner connection necessary for such prominence.

The relation of history to geography is so close that there is no need of argument; historical phenomena have always been greatly dependent on geographical environment. Also, when the fact is recalled that the history of chilization is largely the record of man's conquest over nature, the relation of history to the latter subject is likewise apparent.

But when we come to literature in the early grades, where history is not yet taught, there is more room for doubt. Naturally experiences differ here, since there is much reference to nature in some literary selections while there is little in others. Even in the former case, too, it is often doubtful whether the references to nature really require any study of nature; certainly many times they do got But on the whole the imaginative literature of the early school years does deal with nature in such a manner as to require its study. This literature usually consists of farry tales, myths, "Robinson Crusoe," and legends. It is an oft-quoted merit of fairy tales that they deal principally with common animals and plants; myths are understood to have had their origin mainly in the attempt of early peoples to interpet nature; Robinson Crusoe describes a man's struggle with nature for a livelihood, and the world's legends deal largely with hardships of human beings caused by monsters, the elements, and other natural phenomena. The need of giving a good deal of attention to nature is apparent from these facts; otherwise the stories themselves cannot be fully appreciated. However, some of the best stories seem to have so little reference to nature, to say nothing of a real need of the latter, that competent teachers expersence much difficulty at this point. Hawthorne's story of the Chimera is a fair type of such narratives. I know of a first grade class in which that tale was made the center for concentration during one or two weeks in February last It followed the study of Washington's life with its examples of meeting and overcoming difficulties. It led in nature study to the horse, his uses, examples of his intelligence, his resistance to a bit, etc. "Black Beauty" was read to the children in this connection. Number stories

were suggested by the shoes of horses, their food, etc. Both liquid and dry measure came up in connection with food and drink, one boy introducing gallon at the opportune moment by remarking that their horse drank more than two gallons of water at one time. In written language various subjects were chosen, but on at least one occasion each child wrote short sentences about the horse that he knew best. These were used the next day for a reading lesson. having been placed on the board by the teacher. Longfellow's birthday and the study of the horse together prepared especially for the enjoyment of Longfellow's "Bell of Atri," the poem about the horse that was starving, and rang the village bell for help. In the manual work they drew a horse that they knew, in chalk and in pencil, cutting it out also with scissors; they laid out his barn with seeds and wove mats the shape of his blanket; in water color. too, they painted the fountain and valley where Pegasus came to drink.

This story does not furnish the best possible example of concentration in the first grade, and I have selected it on that account; it is typical of the difficulties that the teacher of the lower grades meets with in making literature the leading branch. Many topics belonging to nature are suggested in it: for example, falling stars, the modes of flying among birds, the origin of springs, sunshine above the clouds, etc. But the fact that they are mentioned is not sufficient reason for their introduction into nature work. To be so studied they should be either demanded by literature, for the sake of a clearer understanding of thoughts therein presented, or they should afford a continuation of some of the leading ideas there, so that the appreciation of both subjects may be heightened. It is evident that a great demand is here made upon the good judgment of instructors. It is very easy to establish artificial connections and to weary the children with talk about the horse. Concentration is a dangerous topic for the average teacher to be thinking about. The healthfulness of the work is dependent on the reality of the relations and the worth of the facts themselves. It is helpful to bear in mind that there is very

little danger of wearying the children with talk about the borse provided the ideas are good and closely related. Long stories do not destroy interest. Few have been more read by boys and girls of late years than Black Beauty, yet it fills a whole book. On the whole, then, the larger the number of ideas on one subject the better, provided they are of the right quality. With these reflections in mind, it is clear that the test of the value of the example just cited lies primarily in the prominence given to the idea, horse, in the parrative, and the need awakened of some study of that animal. The horse is one of the prime actors in the story. And, though he is different from real horses in that he has wings, he is still primarily a horse. He neighs, rolls, gallops, crops clover, capers about, pricks up his ears, snuffs the air, and tosses his head as does any spirited horse. More than that, like an intelligent animal, he is obedient to his rider's voice and to the slightest motion of his hand; he also shows affection by whinnying and rubbing his nose tenderly against his master. Any study about the real borse would be quite in the spirit of this highly imaginative story. Consequently, the reading of Black Beauty to the class and the study of the horse in nature work would be a proper kind of concentration. The appreciation of the onginal narrative of Black Beauty, and of the horse itself, would be increased thereby. Also, nature study would reveal Bellerophon's wisdom in selecting the moment that be did to spring upon the back of Pegasus, and only through it and Black Beauty would a full appreciation of that part of the narrative be reached which tells about Pegasus's enjoyment of freedom and Bellerophon's reluctance to deonce him of it. In some respects, therefore, the story demands such treatment as some of the other branches can give, while through them its leading feature may be so conunued as to heighten the interest in all. For these reasons I regard this story as entirely allowable as a center for concentration. But much more experience and study in this line are necessary before decided statements dare be made as to the degree of relationship existing between nature study and literature during the first four years of school;

there is less doubt as to the connection between history and the other studies when the higher grades are reached.

Enough has been written, I hope, to reveal to some extent the importance of concentration and its difficulties. We are only at the commencement of the investigation of this important subject; it is one of the life problems which helps to make teaching a science and a profession.

NOTE-CONTINUATION OF DISCUSSION AT BOTTOM OF PAGE 36.

The continuity of thought secured by the gradual unfolding of a subject is so conducive to intense interest that it should be aimed at not only in the development of a single recitation, and of a single study, but also in the development of the curriculum as a whole. An example will show how this is possible and the extent to which it is desirable.

In a certain kindergarten the central thought for several months has been the brotherhood of man. In February, Washington was naturally a subject of conversation, and one occasion, his journey among the Indians for the purpose of surveying a large tract of land was the special topic in the "morning circle." In this connection two songs were sung, i.e., "Red, White, and Blue," and "America." There are three other daily exercises in the kindergarten besides the "morning circle," each lasting about thirty minutes. During the second exercise, i.r., the one with the gifts at the tables, one of the three classes of children played that the table was the land to be measured, and with the little gift bricks built fences around the fields, counting the length and width in inches. The class at the second table represented the Indians and their wigwams with sticks and rings. At the third table a large cube was the box in which Washington carried his tools: the cylinders were logs of wood with which he made a fire at night, and the ball suspended over them was the kettle in which he cooked his food.

At game time, the third exercise, one boy chose to represent Washington, another the friend that accompanied him on the journey, and the two went into the forest to measure land. The other participants in the game were Indians, between whom and Washington an animated conversation took place. Finally, at the tables again, for what is called occupation work. One class sewed squares, playing that they were fields; another pasted strips of paper to make a chain for surveying; and the third wove mats for the blankets in which Washington and his friend wrapped themselves at night.

Here we see the thoughts of the morning circle presented through conversation; then the first exercises at the tables presented phases of the same story in a different manner, the children duning in their diminutive way that which before had been described. It was a new kind of employment, which led the children to think over again, or review, the ground covered, but in a more vivid and detailed manner. Those who before did not quite understand the term survey or measure, now actually did some measuring; those who had not thought Indian or regream at all, or only dimly, now represented them by circles and sticks; those who had given no consideration to the particulars of such life were led to reflect about the kind of fuel used for fire and the manner in which food would be prepared.

The games made another addition in knowledge to the picture thus far produced, and in a still different way. Even though all had comprebended that Washington would meet and converse with Indians, still what was probably said between them would remain a blank. Through the games the children were forced to enter more fully into the spirit of the occasion, and even reproduced possible conversation. Thus play itself makes as important a contribution to the general purpose as so-called work. In the fourth exercise, i. e., the ocsupations at the tables, the class that sewed squares to represent the feeds seem to have made no advance in knowledge directly, but while developing skill of hand, etc., they were given an opportunity to dwell longer upon the interesting picture, and by conversation while at work to build it out more fully. Those who pasted strips of paper to make a surveying chain, as well as those who wove mats for blankets, while receiving a training of the hand, the eye, etc., were introduced to a new fact or brought to realize an old one more vividly.

There was real unity in that day's work in the kindergarten. Only one subject was considered, but from four different sides, in accordance with the four lines. Practically, the instruction was a continued work, the four recitations standing related to each other as four successive chapters in a story book. That is the idea, relationship for stallers to bear to one another, for such connection of thought preatly increases the interest excited.

In the example given above, these lines of work were dependent than the thought of the morning circle. The desire is that the work of tach day be determined by that of the circle of the same day. But no the advocates the same practice in the grades, for there the children are more capable of continuous thought in several lines.

THE EDUCATIONAL THEORY OF THE CULTURE EPOCHS.

Viewed Historically and Critically.

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HE idea that the individual recapitulates the experience of the race in his development has existed in some form or other since the time of the post-aristotelian philosophy. Despite the fact that until very recently the theory had received almost no scientific investigation or foundation, it seems to have constituted an essential element in the common consciousness of mankind for ages. The theory of the culture epochs is of a twofold interest; it may be approached from the purely scientific point of view by one who is interested in the general problems of anthropology, or from the practical, pedagogical point of view by the educator. The former point of view implies a vast field for research, including yet undeveloped possibilities in comparative history and culture and detailed investigations in individual and genetic psychology; the latter in so far as it finds the theory sufficiently established by the work of the scientist, is concerned with its educational application, with its effects upon pedagogical means and methods. It is the province of this paper to deal chiefly with the latter, both historically and critically, utilizing whatever scientific foundation has thus far been established and without attempting any more thorough defence of the idea than worthy investigation, past and present, may have worked out.

A. THE PROBLEM.

The problem that still remains almost untouched in all discussions pertaining to the course of study in the com-

mon schools is that of the principle underlying the proper succession of educative materials and activities. The solution of this problem in the past, so far as it can be said to have had any solution whatever, has been assumed rather than thought out, determined on the basis of immediate utility rather than upon any truly educative principle Historically, then, it has but met the common fate of all educational principles, an attention so empirical as at arst almost to exclude its recognition as a problem. It is, however, almost the last to receive an analytical attention.

Let us glance at some of the principles that have hitherto more or less inadequately determined the succession of materials in the curriculum, for the purpose of determining in how far they have met the pedagogical requirements, and in how far and why they have proved to be in adequate. In general we find in the history of pedagogy, two distinct and persistent principles of succession, which we shall designate as (1) the principle of the relative ease of acquisition, or of relative simplicity, and (2) the principle of the logical order in the subject matter. The history of education reveals the influence of these two principles in one form or another again and again, sometimes affected by the influences of tradition or sentiment, but usually under the still stronger influence of a shortsighted principle of immediate utility. It is not our purpose here to review these principles historically; but a few instances will suffice to illustrate our thought.

I The first principle, above named, that of the relative case of acquisition, is an attempt to recognize the limitations which the child himself places upon the work of education. In general, the child is the mental as well as the physical miniature of the adult; whatever he is in common with the latter is the basis of any educational contact between them. But it is observed also that the child is no less to be distinguished from the adult. We say that he is not so mature as the adult, i.e., above all, he has not the adult's power of attention, ready conception, or reasoning; he is not only physically, but psychically, weaker than, inferior to, the adult. Hence he must be given that material first that is

most easily acquired, and methods must accordingly be adapted to his weaker powers and greater needs. There is a certain amount of truth in this principle, crude though it, appears; it has found expression in the fewer hours of work required in the first years of school life, in the simpler materials and activities with which the work of instruction. begins, and especially in the thousand enticing devices intended to help the child over the tedium of formal occupations. But a moments reflection also reveals the fact that the principle of relative simplicity or ease of acquisition. when taken alone, is wholly inadequate as a guide in the selection and successive arrangement of material. how many errors has the curriculum not been led by the attempt to make relative simplicity alone the criterion in adapting material to child. The evolution of the first reader will serve as an illustration of this. Until we have taken the most essential factor of all into the account, we cannot but err in supposing that that which is capable of the easiest resolution when submitted to analytic tests in the mature adult mind, is therefore necessarily simplest to the immature child mind. Here we must distinguish sharply between the genetic, psychological process and the logical process. That most essential factor in determining what should be meant by relative ease of acquisition, has already been hinted at. It is the child; in fact, the history of education shows that educational reform has repeatedly returned to this source for every regulative principle of genetic pedagogy. Thus, for example, we no longer reason that the arbitrary symbol or combination of arbitrary symbols which is simplest as to form (the bird sings) will be most easily acquired by the child, for the latter's thought content and interest in any given case may complicate the process. On the other hand a comparatively complex combination of symbols (Hey diddle, diddle, the cat and the fiddle) would give the child but little trouble, if thought and interest be adjusted to the given occasion, or even if the symbol itself, as in the above case, produce a striking or fascinating sensation. The same is true of the subject matter of reading. Formerly simplicity of thought was courted even to the extreme of senselessness. Now we are fast discovering that a truly valuable thought content, even at the expense of a little simplicity, facilitates the acquisition of the mechanical phase of reading. Few would be so daring as to advocate the approach to natural science by way of its simplest objects; and but few still cling to the idea that because the relations of the earth as a whole are simple as compared with the detailed study of any portion of its surface, the former should therefore be the initial step in the study of geography. On the contrary, we are beginning to look to the child to discover whether he be not able to teach us what sympathy between himself and the materials of instruction means. We must, therefore, class "simplicity" and "relative ease of acquisition" among the purely relative terms, whose significance after all depends upon that to which they relate. They have a pedagogical significance but only in so far as we are able to determine their relatwity. They imply a higher law in the nature of the child. The same is true of the expressions, "from the simple to the complex," "from the known to the unknown," "from the war to the mare remote," etc. (which are really but modifications of the above principle), in so far as they may affect the problem we are discussing, the sequence of the materials of instruction.

2. An examination of the second principle, that of the logical unfolding of a subject and of the logical succession of the different subjects, which has always found very general application in certain branches, and which has frequently been confused with the former, reveals that it, too, a madequate to meet the demands of proper sequence. It an effort to recognize in the succession of the curriculum, the limitations which the logical unfolding of a subject places upon it. In so far it is a principle that cannot be ignored. No branch of knowledge can be said to be truly mastered until it has been seen in its logical and systematic arrangement, and no portion of knowledge can be of any ralue whatever that is not presented to the mind in logical series. But there is a limitation, to which this principle is subject, that past curricula have been prone to disregard.

It contains nothing, psychologically, to prevent starting the child at almost any point in the logical system and working along almost any logical series in any direction whatever. All scientific bodies of knowledge have, in fact, developed in this way, i. e., have been psychologically discovered and unfolded, before logically systematized, The same subject, furthermore, is capable of a variety of logical arrangements; which one should be the pedagogical? Yet this principle has played havor with the practical results in the teaching of many important subjects. Let us call to mind the history of modern language teaching, for example. The significance of habit in all the practical phases of language study long paled before the claims of the logical structure of the language. Elementary textbooks in geography, history, and science have very generally been arranged on this principle.

On the other hand, we cannot ignore the fact that (1) any portion of a subject suited to the child's stage of development, must be presented in its logical connections, and that (2) the final product, if it be available at all as power to the individual, must, from the very nature of mind, be a logical system. Having granted this much to the principle of logical unfolding, it remains to look for a still higher regulative principle. Again, we are forced to admit that our limitations are to be found in the child himself. The child's peculiar environment, circle of thought, interest, and will power, place obstacles in the way of an unyielding and unbroken logical sequence that are insurmountable. The logical order can not be forcibly imposed upon him to the exclusion of psychological needs and conditions.

We may then conclude our preliminary discussion of these two principles, "relative ease of acquisition" or "relative simplicity," and "logical unfolding of subject matter and subjects," as follows: While both express certain essential limitations in the construction of a course of study for the grades, neither can maintain a position of paramount influence, because neither, taken alone, meets the conditions of interest, apperception, and volition, present in the child at any one stage of its development. These limitations,

bowever, indicate the need of a paramount, regulative principle, one capable on the one hand of placing the principle of relative simplicity in the right light, and on the other, of adapting to the needs of child-growth the logical unfolding of a subject. It follows also from the foregoing discussion, that such a principle must mediate between child and school-subject or school-activity; it must rest upon the nature of the child, and, indeed, upon physical traits that find their analogy in the subject matter of instruction. It must be able to strike a bond of deepest sympathy between child and material, between subject and object. Is there any other principle that has so consistently attempted the solution of this difficult problem, as that of the culture epochs or, as it is more commonly termed in German philosophy, "the Culture-Historical Epochs" (Kultur Historischische Stufen)?

Briefly stated, this important principle is based upon the parallelism, or better, analogy between the development of the individual and that of the race. It is claimed that this theory, once established, should be made the guiding principle in the selection and arrangement of materials for instruction, for reasons which we shall hereinafter examine. Before examining the basis for the theory of the cuture epochs, however, or the considerations that lead to its adoption as an educational principle, let us inquire still further as to why any more exact principle of selection and succession is needed in the formation of a curriculum.

1 We have endeavored in the foregoing to show that past principles of successive selection have been inadequate. If this is true, it is in itself one argument for a more perfect principle. The common conception of education, however, as the life unfolding process, a development into fuller, more perfect living, offers another argument. Every conception of education that embraces the idea of development in any form, implies therein a pedagogical principle of right succession in the curriculum. If there is any such thing as a genesis of the psychical powers with which education deals, there must be a principle of genesis in the curriculum otherwise what is there to guarantee that the materi-

als of instruction at any one period of the child's school life shall not be arbitrarily forced upon him, shall not rather violate the genesis of nature. Let us be in practical earnest with this idea of furthering the natural development of the child, and inquire in how far the arrangement of the curriculum may contribute to that end, and in how far education is, after all, necessarily more or less arbitrary.

2. Perhaps the most forcible argument in behalf of a true principle of succession is to be drawn from the whole problem of selection in framing the curriculum. As has already been implied, the two tasks of selection and sequence are intimately linked together. It would be impossible to undertake the one without a knowledge of the requirements of the other. REIN very aptly portrays the situation in the following words: "Culture comprehends the entire sphere of human labor, every thing that man has ever felt, experienced, thought out, and attempted in the fields of either humanistic effort or natural science, -an immense treasure, which men have thus far amassed, and which, day by day, they set about increasing unto infinity in order constantly to enhance their power over the life of Man and of Nature. Into this powerful stream, which taken in its depth reveals but a single movement, while on its surface the most varied currents rush side by side, often begetting eddy and whirlpool or crowding one another, -into this stream is placed the unfolding human being with the hard requirement of making its power his own that he may in turn contribute to the power of the whole." The more thoroughly he grasps and assimilates the powers that have been, the more thoroughly does he become master of the situation about him, the more efficiently does he grapple with the problems of the future. But how shall this grasp of the world's culture be attained? Before this vast (shall we call it) treasure of culture, the key to the present situation, the limited capacity of the human intellect seems impotent. Indeed we are in danger of educational materialism (Doerpfeld's "Didactic Materialism") as long as there is no clearly defined principle of selection and succession. The former is furnished in part, at least, by the

aim of education. Education aims at the ethical development of the individual, and to this end seeks to impart a broad grasp of the essentials of the world's culture, so that they shall result in ready power to the individual, and ultimately in enhanced power to the people, the race. But even an approximate realization of this aim presupposes (1) a careful distinction between essentials and nonessentials, and (2), what is still more important, the possibility that certain elements or bodies of culture are capable of standing for or typifying many other portions. It is these type or representative circles of the world's culture that the educator seeks to free from the interminable mass of accumulated lore and to utilize as the stimuli of power in the rising generation. Such is the problem of selection. It means, ideally, the redevelopment in the individual of power already developed in the race. Therefore the principle that shall determine the selection of cultural materials and activities must be able not only to indicate such representative and type elements of culture as will best further the development of personal integrity and the power to act, but also to guarantee that these representative materials will be able to seize the interests, instincts. and ideas of the developing mind at the height of their formative capacity.

- 4. The conception of interest alone, which is fast becoming a powerful factor in pedagogical practice, furnishes a strong argument for a principle in sympathy with the child. In the future, interest will be largely determinative in the selection and arrangement of the materials of instruction. It should be the immediate aim of the teacher to arouse in the soul of the child a many-sided interest, for true will activity follows only in the wake of developed interests. But the child's interests are subject to the variations of development; these variations must be met in the materials and activities we impose upon him.
- 5. Perhaps no educational idea or theory has been more rapidly, and withal hastily, advanced in recent educational thought than that of "concentration." Nothing is more striking in the contest between nature study and literature

and history for the central position, than the fact that both sides have ignored almost wholly the need of a principle of selection and sequence. Evidently in all such cases, concentration has been conceived of only as dealing with co-ordinate materials, never with the succession of materials. This is, however, a narrow conception of the problem of concentration; it establishes a series of centers throughout the period of education and provides for an interrelation of thought materials accordingly, but the connection between successive centers receives little or no attention. Before we can cope successfully with this difficult problem we must realize that the genesis in the child's life calls first of all for a "leading motivo" in the curriculum from first to last, that shall accord with the growth of the child. This "leading motivo" will then give the theme to the entire curriculum and the question of the true center for concentration will have been answered. The developing personality of the child must be the center of all true concentrative effort.

The above are some of the considerations that impel us to an historical and critical survey of the theory of the culture epochs. It now remains to see what position the theory has occupied in the history of education, to inquire into the grounds for accepting it as a pedagogical principle, either in part or entirely, and to determine its practical bearings.

B. HISTORICAL AND CRITICAL REVIEW.

Although we do not wish to assign great weight to authority, it is at least interesting to note with Prof. Vaihinger, of Halle, how many different fields of labor and research have reached this conception of parallelism between individual and race development from different points of view and by different methods. Vaihinger's summary (Comp. Paed. Stud., '88, s. 93) is about as follows:

(n) The conception was advanced from the religious and theological point of view by Clement of Alexandria, in his writing, (the Paidagogos,) directed against the orthodox zealots of his time who rejected the study of the Greek

literature. He showed how the divine educator of the world had led mankind through the culture of the Jews and the Greeks up to that of the Christian world, and argued hence that the same process should be preserved in the education of the individual of his time. The same idea is expressed by Augustine, and in more recent times and in a somewhat different form by Herder, Lessing, Schleiermacher and others.

(b) The theory has been reached inductively. The comparative study of the phenomena of mental growth, on the one hand, shows certain stages of mental delelopment in the child. On the other hand, quite independently, the history of culture finds, both in the development of the race as a whole, and in the development of an individual people or nation, certain laws of progress and stages of growth. A simple comparison of the results of these two independent lines of research shows that the stages of development in race and individual are essentially analogous. Thus Herder, Jean Paul, and many others since their time.

(c) Still others have reached the same conclusion deductively from the aim of education, viz., the uplifting of the child to the present cultural plane. It is impossible to proceed from the present historically, since the child does not possess apperceptive material for grasping modern culture in its relations to the past. Hence it must rise up to an appreciation of the present through lower stages of development. This point of view has been presented by Heroart, Ziller, F. A. Wolff, Kapp, Niethammer, Dissen, Luebker, Petersen and others. Rein calls attention to the fact that it is a union of these two points of view (2 and 3) that must furnish the complete guide in the application of the theory.

The deductive philosophical method has been emprojed by those who hold to the philosophy of development of legel and others. Since the universal principle of derespondent regards all things in the world as following the same aw of growth, it follows at once that this is true of the child, and the principle becomes one of pedagogy as held as philosophy. This method was pursued by Hegel and his disciples, and by Krause, Froebel, and others.

(e) The method of natural science follows the point of view of Darwin. The principle of evolution, that all ontogenetic development recapitulates the phylogenetic development, is carried over from the physical to the spiritual phenomena. Those who have argued from this point of view, are von Bær, Darwin, Spencer, Huxley, Comte, and others. It is true, however, that this apparently simple expansion of the application of a physical law so as to include spiritual phenomena, meets with certain difficulties, for the law can be shown to be applicable only to embryonic development, and the individual, as soon as he begins to live an independent existence, is subject to influences from without that may materially alter what would otherwise have been a development in close conformity to the generic type. This is a limitation of the theory, in fact, that we shall find of essential influence in its pedagogical application.

This principle of the Culture Epochs, then, has received attention enough from leading thinkers since the time of Kant to merit an historical review of its growth, especially as a working theory of pedagogy. Without attempting to trace it back to its earliest beginnings, therefore, let us see what the philosophic and pedagogic thought of something more than a century has to offer, for the purpose of determining what changes the principle has undergone, both

theoretically and practically.

1. Among those who first approached the thought during the period we have in mind, we may mention Kant, Jean Paul, Gorthe, and Pestalozzi. One method of approach seems to have been characteristic of them all. Contact with human culture in the pursuit of other problems seems to have led each one incidentally to a more or less well defined intuition of the analogy between generic and individual development. Hence each one has given expression to the idea more or less vaguely, while neither sought to substantiate the principle by any special research. Kant asks whether individual education should not properly imitate in its different generations the culture of mankind in general. Similarly, Gorthe: "The youth must always begin anew at

the beginning and as an individual traverse the epochs of the world's culture;" and "One could be genuinely 'estheticdidactic' if he could pass with his pupils before all that is worth feeling, or if he could bring it before them exactly at the moment in which it culminates and when they are most highly sensitive." This is indeed the ideal of the culture epochs. Goethe was undoubtedly conscious of the fact that there is a growth of the interests in the human mind, and that educational means and activities are best employed when most closely adapted to the given stage of development.

2. Pestalozzi was not alone content to contribute to the pedagogical method of the class-room. He was not ignorant of the fact that the materials of instruction themselves have an important part to play, and that correct principles of selection and arrangement constitute an equally important problem of method. Despite the fact that he evidently stood largely under the influence of Rousseau, he was yet original enough to recognize in his writings the need of learning from the experiences of past ages. This view he maintains with great energy: "Wherever you give over the earth to nature, she bears weeds and thistles, and whenever you give over to nature the culture of your race, she leads it no further than into a state of confused perceptions." Again, "I go still further; neither at the very begraning, nor at any time in the succession of knowledge, do give over to chance, what nature, place, and mother me bring before the child's senses from his infancy on." Pestalozzi furthermore expresses the view that in the impressions to be made on the child in instruction, and consemently in the subject matter used for that purpose, there * a sequence the beginning and development of which find I rallel in the child; and he regards it as his paramount duty to determine and apply this sequence, embracing therein all that is essential and typical in human knowledge. He conceived of this sequence not merely as applicable to the growth of the understanding, but also to the moral growth. On the other hand it should be noted that, practically, Pestalozzi's thought was narrowed too exclu-

sively to the environment of the child, to those sense impressions which nature offered directly. In consequence, his practice neglected the culture-historical materials of education. This fact, together with the meagre grasp of the psychical development of the child, characteristic of his day, account for the fact that Pestalozzi never applied the conception be expresses in his "Wie Gertrud ibre Kinder lehrt," and in "Meine Nachforschungen über den Gang der Natur in der Entwicklung des Menschengeschlechts." In the latter, a writing of Pestalozzi's that is much too little read, the attempt is made to correct and further develop Rousseau's ideas, starting with the proposition that the psychological unfolding of the individual and that of the race are analagous. Contrary to his principles and his reformatory struggles, however, Pestalozzi ultimately came to follow another principle of succession, drawn entirely from the logical order in the subjects of instruction, and it is in this point that his teachings have been most closely followed by his disciples.

3. Herbort was early impressed and influenced by what he saw of the work of Pestalozzi in Switzerland. There he found something in harmony with his own conception; in his comments upon Pestalozzi's "Wie Gertrud ihre Kinder lehet," he has given expression to his complete agreement with Pestalozzi in this fundamental question of the curriculum, as follows: "A complete regularity of sequence, meeting all requirements, was the great ideal in which I beheld the most thorough means of assuring all instruction of its right effect. Correctly to determine this very sequence. arrangement, and unification of all that should be taught, either simultaneously or successively,—this was also, as I perceived, Pestalozzi's chief endeavor." It was the continuously progressive interest that lay at the foundation of the order of arrangement in Herbert's curriculum. desired that "the entire instruction in literature and history be so shaped as to afford everyone of school age the most suitable stimulation." He pointed out that "if one would prepare the youth for spiritual elevation, he should see what the spiritual development of mankind has been. In

this way, by imitating the traces of moral culture in the human race, the educator shall see in the progress of his pupil a recapitulation of the great progress of mankind." But Herbart went farther than this general statement of the theory; he sketched a plan for the language and historical materials of the curriculum (which he himself applied in his own practical experiences as a teacher), in which this idea found direct application. "The beginning, as is known, was to be made with Homer's Odyssey; and why? In order that the heroic impulses of boyhood may neither disappear without serving a purpose, nor degenerate, but rather lead on to the period of reason, they need an ideal presentation of such men as achieve what the boy would like to achieve, and who at the same time reveal the more suitably the transition to a higher order." (Rein.) Thus Herbart placed the boy hood of the child parallel to the boy hood of the race. The further course of development in the curriculum he has merely indicated, but never as clearly expressed as the above. But starting with this boyhood age, he followed closely, in large periods, the chronological ascent from the older to the newer; Roman history and language were introduced in the middle of the course, and modern history and language at the close.

There can be little doubt that Herbart had a strong arcument for the priority of early Greek to Roman culture. Its point of view that "the trunk of all European culture from in the land of the Hellens," has practically received the tersal recognition since his day. But there seems to be comething forced in concluding, on the basis of the culture pochs, that the Greek language must precede the Latin and the latter the modern languages. Languages are the latter the forms in which the culture of peoples is embodied while the very conception of the culture epochs points to the thought content of a people and at the developing interest of the child, rather than at the forms of a people interest of the child, rather than at the forms of

Before leaving the discussion of Herbart's conception of the culture epoch theory, we need to note two passages from his writings referring to it that are of very great im-

portance to our future discussion. Many who reject the idea of the culture epochs, argue from the fact that the child is in the present, passes judgment from a modern point of view, and grasps all things in the light of a present environment. Why, then, it is asked, must be be forced to repeat the errors of the race? Or: Does he repeat the errors of the race? etc., etc. Of course this idea that he is to repeat the errors of the race is due to an entirely false concaption of the theory. We shall recur to this class of counter arguments later, merely stopping here to quote some words of Herbart's that will serve as a key to the situation which should be kept in mind. "But just as the human being should not sink back below the level of his time, so too the judgment of the boy or the youth should soar above the times with which he advances, indeed, he should feel himself impelled to progress by the judgment that says to him at every point,—here mankind cannot remain at a still-That this judgment may be possible, the object must be neither too high nor too low." Could the attitude of the student's mind toward the developing ideals of the past be better defined?

Another counter argument is similarly drawn from that much abused and well worn pedagogical principle. From the near to the more remote. Herbart claims, and with truth, that for the child, "the past is the true present." for, "what (in human relations) is the near? Do we not see that great space between child and adult? It is as great as the long stretch of time that has brought us up to the present plane of culture."

In concluding this review of Herbart's position we have to note that he did not apply the theory of the culture epochs to other than the humanistic branches of instruction, that, in fact, he desired to see the historical progression kept clear of the natural sciences and vice veisa. He says, "It were absurd to make the pupil's instruction in these subjects (natural sciences) dependent upon the gradual progress of discoveries."

Following Herbart with one or two exceptions the leaders of the Herbartian school of thought have accepted, reinrestigated, and applied this theory more or less faithfully and carefully. Waitz and Stoy passed it by unnoticed. Lange and von Sallwuerk are the most notable among those who oppose the theory either in whole or in part. Those who have taken up the idea and given it the tests of deeper research or more practical application are, in chronological order, Brzoska, Ziller, Willmann, Vogt, Hartmann, Bever, Rein. We shall review only the more important of these

4. Zitter, in his practice school at the university of Lapsic, was the first to add extensively to Herbart's attempts at practical application. He accepted, perhaps even too minutely, the parallelism between generic and individual growth, and emphasized the important concomdant principle that "for every stage of instruction, for every class, a thought-whole must be placed as the center of concentration which, because of the moral purpose of the work of education, must be material that makes for character" In Ziller's plan for the eight years of the "volksschool the centers were as follows 1. The epic folklore stories 2. The story of Robinson Crusoe. 3 History of the patriarchs. 4. The times of the judges. 5 The times of the kings in Israel 6. The Lafe of Jesus. 7. The histry of the Apostles 8. The history of the reformation and the catechism. Beginning with the third year a second weeks of material drawn from profane history (that of the latterland) is co-ordinated with the sacred series. In these thought wholes of material the pupil traverses, "correspending to his own development, the chief periods in the detelopment of mankind." Ziller has been so often mis moted that we need to make a typical citation: "All hisfor and, in fact, the entire cultural development both of songle people and of all mankind, is stored up chiefly in be master pieces of language; and the chief (this word is often ignored in quoting him) epochs of this development guite accord with the chief stages in the individual devel opment of the pupil. Hence the mental development of the import cannot be furthered better than by drawing his mental nourishment from the universal products of culture as deposited in literature * * * " We lay stress upon the term "chief," for, as we shall see, within this wonderful analogy between racial and individual development, there must still be room for the play of individuality. The attempt either to draw the lines too sharply and narrowly in the one case, or to give too great scope in the other, will always result in a conflict. The natural capacity (1) to recapitulate his race's experiences, and (2) to add to them by virtue of what he is better than anything before him, i. e., by virtue of his distinctive individuality, are two factors neither of which should be overlooked or overestimated, for the full force of the one can only be seen in the light of the other.

But how has Prof. Ziller established the parallelism be tween the above mentioned successive thought-wholes and the growth of the child? He has done so in detail only for the first stage, though in this instance his complete argument is truly classic: "Despite all individual differences, the mental condition of all normal children is characterized by the predominant activity of the power of imagination. The fairy stories and their poetic conception of the world are the product of the fancy of peoples in their childhood periods; their spirit is therefore in complete harmony with the inmost being of the child, and the spirit of the German fairy story in complete harmony with the German child's mode of viewing man and nature. This explains both the ease with which, as experience has shown, the child grasps the fairy story, and his desire and longing to hear it.

In the XIII Jahrbuch des Vereins für wissenschaftliche Pädagogik, Ziller sums up briefly his idea of the parallelis mafter the first two school years, as follows: Having follow ed the career of a single individual (Robinson, second school year) struggling upward by his own efforts, the child must be brought to realize his own relation to a larger community through the following stages: He must—

(a) Learn to subject himself unquestioningly to the authority within such a community, even though it be at first without all reflection and in that pure childish trust which he has evinced very early in the family by his devotion to his parents. Then—

(b) Within the circle ruled by that authority, thoughts of his own will begin to bestir themselves spontaneously, and to stimulate new motives, though at the danger of carrying him astray sometimes.

(e) Then he must learn consciously and voluntarily to subject himself to an authority, in which, perhaps, he may

begin to anticipate a highest authority.

(d) He must learn to know and love the Highest Authority itself, which is to exercise a royal prerogative in

er He must learn to labor in the service of this Highest Authority, at first in his own heart for the purpose of realizing in himself the ideas of good will and inner spiritual and religious freedom, finally, also,

(f) To bring about in the social and political culture of the larger community to which he will belong, a like moral

aspiration.

The following epochs in the social and cultural development of the Jewish people seem, according to Ziller, to correspond to the foregoing stages in the development of the relations of the individual to the community

o) In the patriarchal state, which is, in fact, but an extension of the family relations, the members subject themwives to the chief in purely trustful obedience, as children to parents, and, except in extreme cases, without thought of self direction.

- their greatest, Moses, there appears in the intellectual life of the Israelites an actively imaginative period; during this time the people raises its leaders to the position of heroes, thus bringing about a more general feeling of nationality, but at the same time betraying them into all sorts of excesses.
- o) The Israelitic people subjects itself voluntarily to a myal authority, which is alone able to produce a safe relation of equilibrium in the form of a united state, and which appears to the people to be a visible bearer of the divine who, administering justice and retribution in accordance with the divine commands.

(d) But the consciousness of every people must be filled with the pure spirit of Christ, if it is to be raised to the highest stages of its moral existence, and

(e) It must seek to permeate its own social life with this same spirit, which the apostles spread abroad through the world, first through the expansion of its culture and the dissemination of a universal feeling of good will, and finally,

(f) In order that all its social and political relations, as far as possible, may be in accord with the ideal of a morally inspired society, an earthly kingdom of God.

"These culture-historical stages, which seem to correspond to the normal development of the child-mind, and which on this account should be best able to further the development of the latter, still by no means exhaust the entire culture-historical content which each moral and religious character that is to act in the present needs. Other historical and culture materials must amplify the mental image of society and its relations to the child, in accordance with the spirit of each epoch."

Ziller's application of the culture epoch theory, which is really Herbart's conception somewhat more closely defined and restricted to the national materials, except for a certain parallelism which he has been able merely to indicate, strikes one as still rather more theoretical than scientifically grounded. But it has formed a center from which have radiated a great variety of practical plans conforming. more or less freely, to its general suggestions. In one respect, however, Ziller certainly departs from Herbart's more conservative standpoint. The latter went no further in advancing the theory, than to maintain that there is a certain predisposition in the mental constitution of the child to follow the general plan of racial development, and that to utilize this predisposition is to keep in closer sympathy with childhood's developing interests, instincts, and impulses. Ziller, however, goes to the extent of marking off in his course of study, the exact year, for example, in which the child subjects himself voluntarily to a higher authority. This is but drawing the arbitrary walls of education too

closely about the child, which must always result in cramping the development of individuality. Ziller ignores the fact that the most varied ethical standpoints may be assumed by the child at any one age, sometimes as a result of his changing moods, sometimes as the product of that never latent impulse of imitation; that the same pupil, well edu rated and well trained, may continue to evince for years, almost side by side, both eudamonistic and purely ethical ideals. These facts still point to the necessity of more exhanstive observations and research, before we can hope to have knowledge so definite as Ziller implies. Certainly Zdler has drawn the lines too sharply here, and has failed to distinguish between the emotional phase of moral appre cation and the volitional phase of habitual moral choice. We shall recur to this point again later. For the present it will suffice to repeat again. These epochs, the character mation of which must ever remain general in nature so far is educational needs are concerned, cannot be held to too narrow and definite time limitations; this follows from the very conception of development. They must be given freedom and breadth, allowed to overlap and to lose their boundary lines in one another. This requirement has been recognized more adequately by the following former student/ of Loter's

5 Prof. Vopt, of Vienna, holds that "the sequence of subject matter from a scientific pedagogical standpoint, should never be allowed to depend upon caprice, either openivor covertly, but should be supported by good grounds, for only by this means can a necessary connection in the material be brought about." He calls for such a sequence of material as "will, in general, correspond to the stages of the child's mental development and at the same time represent culture epochs of mankind. "In the supplement to the XVI Year book of the Verein fur wissenschaftliche Pardagogick, Vogt briefly sets forth his views as follows:

There are individual stages of development for the child mind, as well as epochs in the development of a certain people or of mankind that are analogous to the former. Both phylogenetic and ontogenetic development

may be viewed in part as intellectual, in part as practical (i. e., moral)." The two series of development may be paralleled as follows.

(a) Intellectually the individual exercises * * first an imaginative, then a matter of fact, and finally a reflective mode of thought, so that there is in his thought connections, a progression in accordance with the categories

of possibility, reality, necessity.

a historical, and finally a philosophical mode of perception and thought, which are shown successively in the intellectual products of the people, so that, as Herbart expresses it, poets, (especially the epic.) historians, and philosophical thinkers are the successive bearers of the evidences of progress

- (e) Practically, (morally) appear the three following stages of individual development; first blind, then voluntary and finally moral subjection of the will. Instead of this, one may say, dependence on another's authority or sovereignty of another's authority, free action under the authority of law, and self authority or sovereignty of the ideas.
- (d) Finally, the corresponding stages in the development of a people, from the moral point of view, are the age of heroes, the age of state building, and the age of social and political advancement. Instead of this perhaps one would better say: A social condition organized (1) on the patriarchal plan, (2) on the legal plan, and (3) on the plan of internal fitness for social advancement. In reality the time of the Jewish patriarchs and of the Greek and Roman kingdoms correspond to the first epoch of development; the times of the Hebrew judges and in part of the kings, and of the Greek and Roman republics, to the second; and finally, the times of the Christian communities in each nation to the third.

"If the third period does not reach realization; if, on the contrary, internal dissolution take the place of progress from the legal to the purposeful and rational organization of society, then the people falls into dependence. Thus the

Jews in the times of the kings fall before the Assyrians and Babylomans, the Greeks before the Romans, and the Romans before the Germans. But, the conscience of the people has not become wholly dependent; on the contrary, in these times of incipient or spreading dissolution appear men, as representatives of the national conscience, to lift up their tonces, show the right way, and prove that the third period of development, while it has never yet reached realization, still lives on as an ideal demand. Such was the attitude of the prophets as contrasted with the Jews at large, or of Christ as contrasted with mankind. The ethical writings of Socrates, Plato, and Cicero offer analogies to the above."

These very aptly drawn parallels bear a certain resemblance to Ziller's. They differ, however, in that the sharp time boundaries of the latter have been eliminated and the number of steps reduced. In so far, the theory is much more approachable for educational purposes; while the general parallelism stands out the stronger. Vogt's analysis is a step toward the recognition of the fact that all naming and letning of the stages is merely a matter of convenience in analysis and discussion.

- dosing this article) has made use of the field of child study to determine, as far as possible, the characteristic phases in the development of the child during the first fourteen years. Its analysis, based upon extensive studies of child-nature, these results that are very helpful in making a comparison with racial development. For purposes of comparison and interentiation, Hartmann distinguishes six stages during these first fourteen years of the child's life in which he finds the following traits most prominent:
 - (a) During the first three years of its life the activity of the child's sense organs is developed. The child is almost abolty under the influence of their activity. According as the sense activity is more or less acute, do the first ideas, moods, and desires of the child appear with greater or less definiteness. The child is indiscreet because it lacks "Herience; inconstant, because its perceptions are as yet intorganized, willful, because it possesses as yet no moral

guides. It is quite incapable of *inner* thought activity. As soon as it awakens it will be entertained, will see or hear something, or move itself. But its field of perception is constantly expanding; speech and the power of memory develop.

(b) In the second stage, which is to be thought of only as gradually differentiated from the first, and as a further expansion of its activities, is the beginning of self consciousness. The child is no longer chiefly receptive, but begins to react upon the outer world so as to betray unmistakable evidences of an active inner thought-life. It begins to compare, to distinguish, to imitate, and to combine; to group ideas and to connect them in sequence. The formation of a circle of thought is begun. The most charming expression of all this is found in the free plays of childbood prompted by the childish fancy. The child's play becomes less aimless than before; it can entertain itself better, is inquisitive, has a thousand fancies, prefers stories that permit a free play of the fantasy. Desires less to be entertained than busied. Begins to reflect and to be more prudent; inconstancy gradually disappears, it can remain occupied longer with one thing; it becomes more attentive Furthermore the sense of honor is awakened; the child is sensitive to praise and blame; the moral judgment appears. conscience announces itself; there are evidences of incipient interest in the weal and woe of others; the child rejoices with the happy, weeps with the mourning.

These two stages, more or less arbitrary in their sepation, may be roughly designated as (1) the stage of predominant receptivity, and (2) the stage of predominant reproductivity. They characterize the child approximately as he has developed before entering school.

(e) The third stage includes the years of school life in which the fantasy still holds sway. The predominant form of thought is still the imagination, and as such not wholly favorable to a grasp of realities, especially as the child lacks just those stable conceptions (space, time, cause, effect, etc.) that are capable of meeting and overcoming the indefiniteness, vacillations, and distortions of the uncon-

trolled imagination. Morally, the child displays complete trust in the authority of the educator. But it is not wholly free from selfishness: it seeks the favor of the teacher and apt to avail itself of other advantages regardless of its comrades. This stage may be roughly summed up as the stage of free fancy and childish trust.

(d) The fourth stage (approximately ninth and tenth years) finds the child noticeably more capable of prolonged attention to the same thought or experience; it is more constant and more attentive. As a result, ideas of objects and events are much more definite. The reproduction of these deas now becomes truer to their original connections and order, is intact. This fact is so prominent and of such great importance for the higher mental development of the indiidual, that the child may be said to be in a stage of mechanical memory (intact reproduction). Morally, the personal feelings of the child become more and more promment, and with them the desire for independence. The ociety of adults is now sought less often because among them the child's personal will is less free to express itself. For the same reason boys and girls associate together less requently. The boy's play is more lasting, purposeful, and samest. Another characteristic is great bodily activity, often bordering on wildness; with this is associated recurant quarreling, assertion of personal rights, teasing. Still the boy subjects himself willingly to the leadership of the hore energetic comrades, if, indeed, he himself does not besome the leader. He subjects hunself to the authority of the educator without reflection if the latter shows himself to be a firm, moral character. Otherwise, if the educator * monstant, has evident weaknesses, children in this stage anderstand only too well how to utilize these defects. In tef the fourth stage is one of predominant mechanical memory and subjection of the individual will to an authorbu common will (will of the educator).

O The tifth stage (approximately the eleventh and like of the years) is characterized by a still higher form of mentionale that has never appeared so prominently before. The materials of thought are now given a new basis of interre-

lation; no longer subject chiefly to the fantastical or the merely mechanical form of reproduction, they are rearranged and systematized on the basis of their intrinsic and internal relations. The idea is placed in its logical relations to the entire body of thought and freed from the mechanism of external associations. Logical thought, reason, now hold a more prominent place. Or, to put it in still another way, there is a stronger tendency to pass from psychological to logical concepts. The child's acts are now more consciously and hence more morally performed. There is a steady increase in the power to control his actions. The pupil now subjects his will to that of another, not merely because the latter demands or requires it, but because he is capable of recognizing that this will is superior to his own in both moral content and endurance. The comparison of his own deeds with those of others, especially the act of looking up to patterns of moral action, clears and strengthens the pupils moral insight and thus enables him gradually to gain a valuable measure of his own actions. On the other hand, however, his deeds are not always free from eudamonistic motives, so that while they are evidently performed with the desire of doing right, they are not always sure to be unaffected by side purposes. The child performs what is good less for the sake of the good itself than as a process of imitation or for the purpose of recognition, hence for the sake of external values. The presence of strong feelings of and desires for honor, show how completely the child already feels its position as a member of society. Wherever there are like tastes among children of this age, cases of close friendship or "chumming" are frefuent. Often the relations to the family lose their intimacy at this stage, because of the increasing feeling of selfhood, of greater independence. The will is stronger, the insight greater: both have removed almost entirely the child's former helplessness. Now, too, there is a growth of the crea tive impulse; there is energy in the attempts to create, but a want of persistency in bringing them to a conclusion. Often that which is not a success will be at once destroyed. In general, the fifth stage is one in which the understanding

is rapidly approaching the ascendency and beginning to influence the moral life.

of) The sixth stage (approximately the thirteenth and fourteenth years) is a continuance of the movement as characterized in the fifth. The sovereignty of the understanding becomes still more apparent, formation of concepts easier and surer; judgments are more exact. The will becomes strengthened so as to direct the action in accordance with moral ideals. Self direction may now fairly begin. The child is capable of persistent creative effort, and of labor for more distant ends. This stage is, therefore, one of the sovereignty of the understanding and of a stronger moral activity determined by moral ideas.

In general, Hartmann's analysis, as set forth above, based as it is on scientific inquiry and a broad knowledge of child growth and child nature, is worthy of recognition. Hartmann undoubtedly goes too far, as did Ziller, in attempting to ascribe these stages, even approximately, to definite years. All such limitation and fixing of the absolute number of stages can not but be arbitrary, and they are a hindrance to the intelligent grasp of the culture epochs I they are understood in any other way than as arbitrary boundaries set for purposes of analysis. It will be sufficient to have characterized the main features of the movement in the child's development. This Hartmann has done fairly well and we shall have occasion to refer to his main thoughts later It will be found, however, that the deviations among individual children when compared with these general stages increase as the age of the child increases a fact that is to be accounted for by the differences in environment both as to quality and quantity of effect. Another factor that will always variously affect the development of children in these later stages is the physical basis. During the last three stages, as marked out by Hartmann, there are always periods of rapid physical growth and of importhat physical changes, both of which may induce temporary inhibition of certain lines of mental growth and an undue acceleration of others. The normally endowed child passes over these periods in safety, if the attending conditions be

favorable. If the child's physical endowment, however, be short, or the attending conditions very unfavorable, these periods are very apt to make serious modifications in the plan of development as set forth by Hartmann.

7. Beyer: We remember that Herbart conceived it to be impossible to apply the historical movement to the succession of materials in the natural sciences. Today we may well ask, whether this question is not worth reconsideration, especially since the noteworthy attempt of Dr. O. W. Beyer to apply the genetic principle here also. It has often been noted in recent years that one of the best motives for the human intellect in the approach to a study of nature lies in the relations which scientific thought bears and always has born to human institutions and human progress. The question of priority of rank among the various sciences in the grades is still an unsettled problem. It will continue to be until the specialists in these lines leave the question of place to be settled by general didactics. Beyer's plan is to seek in the field of natural science those classes of material that, from the standboint of interest and thought-content, he closest to the child's native instincts and interests, and at the same time conform to the changing scenes of the his torical movement. His work (Die Naturwissenschaften in der Erziehungsschule) is most carefully thought out and de serves the close and careful analysis of all those interested in the problem of the place of natural sciences in the common schools. We have space here for but a very brief and cursory summary of his main thought. It is striking that Dr. Beyer has hit upon a principle of succession coordinate with the historical movement, that has long been accepted by the political economist and which is based chiefly on man's successively developed relations to natural forces and resources, as the external phase of his cultural growth. He then asks, may not this suggest the relation of the natural sciences to the "leading motivo" of the curriculum? The chief stages of human development, when viewed from the side of man's reaction upon the stimuli of nature, are (1) The stage of the hunter: (2) the stage of the nomad; (3) of agriculture; (4) of the primal division

of labor, development of the manual trades, retail trade and small cities; (5) metropolitan life, commerce, whole--ale trade, and great industries. These are the phases of human progress with which a more and more complete knowledge of nature's laws and resources and their more and more perfect utilization, have stamped the history of mankind and the development of human institutions. How do they compare with the spiritual side of the move ment? In reality the two coincide. Comparing with Ziller's characterization, for example, we find the hunter opoch represented in Robinson Crusoe; the nomadic epoch in the history of the patriarchs; the agricultural epoch in the history of the kings and judges; the epoch of the first great division of labor, etc., in the German middle age, and that of metropolitan life and wholesale commerce and in distry in the time following the latter down to the present.

This parallelism, applied to the curriculum, suggests not only a motive for the approach to the study of nature, but also the general character of the material in the various grades, making in the common schools purely physical sciwas es in the main tollow the biological, a principle generally onceded. The greatest value in the principle of Beyer les in the fact that each stage is suggestive of the essential plation nature and her laws and resources bear to human mwth. The hunter-epoch suggests the contact with nature which at the outstart the child himself requires for the sake of sharper and more perfect sense perceptions; the nomadic, the ideas of the care, protection, and use of animals as a motive for better understanding them; the agricultural spoch the school garden as the practical application of point knowledge; and finally, the epochs of the industrial and trade development, the school work shop and the school laboratory, wherein physical laws are concretely demonstrated and applied. As a careful perusal of his work mows. Beyer by no means intends so to apply these stages that each grade would be restricted to but one sort of matenal, but rather to bring the realistic branches naturally into sympathetic touch with the humanistic movement. Finally, let us note that these economic epochs are in close

sympathy with the stages of volitional development in the individual as set forth by Hartmann—caprice, childish trust, subjection to a just will of the whole, insight into the moral law, voluntary conformity to the moral law, and self direction. We may fairly concede to Beyer the application of a principle of coordination of the natural sciences with the humanistic movement, that neither requires superficial points of contact for concentration, nor violates the law of development in the subject, but does maintain the only essential relation that the natural sciences bear to practical man, viz., their bearing on the social and institutional development of mankind.

8. Rein: We now come to one whose greatest service in this field has been to show how barmony and rhythm may enter into a carefully and thoroughly arranged course of study. Rein, who in the end he conceives for education, is a thorough Herbartian, cares less for the mere mass of knowledge to be imparted than for the moral and religious strength of character, the power and energy in action, the grasp of modern social, industrial, and political relations which are the outcome of the work of education for the in dividual. In this free position he has been less at the mercy of the great mass of modern European culture than almost any other one of his countrymen. The needs of humanity. socially, industrially, politically, morally, decide for him what shall be preferred and selected from the great wilderness of material. Therefore the following principles of selection, which are worthy of being reviewed in their concrete effect upon the curriculum, fairly represent his point of view. (See "Theorie and Praxis," das erste Schuljahr

- (a) The pursuit of the national culture, presented and grasped in the light of the esthetic judgment, calls up a permanent interest in the developing human being. Hence chronological ascent—i.r., in general, not necessarily in detail—from the older, simpler, to the newer, more complex epochs and relations.
- (b) Classic presentations, such as are available for the youth, are to be made the basis of these studies. "Periods that no master described, whose spirit no poet breathed, are

of little value for education" (Herbart). Only classical presentations invite the pupil to return to treasures that always reward him; such alone furnish lasting nourishment for his interest and inspiration. It is only from such sources that the past speaks to the present with a clear, strong voice.

(c) Large, entire and connected portions of a subject are alone able to arouse a sufficiently deep interest and sympathy in the youthful mind, to keep it permanently on the alert and thus to affect the formation of character. "Great moral energy is the effect of great scenes and entire unbroken thought masses" (Herbart).

Rein accepts the movement for the curriculum furnished by the culture epochs, preferring, however, to preserve space for individual movement by withholding from all attempts to fix the limits of the culture epochs at any specific age. As we have already seen, these limits merely serve the purposes of analysis, and are in consequence more or less arbitrary and narrow. It is the continuous unfolding of the life process that we are trying to assist with material that is in greatest sympathy with the child. Rein conceives of an arrangement of such materials for the German Volksschool as is indicated in general in the scheme below. Brief and general as it is, the scheme speaks for itself.

M. HOOT, YEAR.	MATERIALS OF INSTRUCTION.		GENERAL CHARACTER OF EPOCHS.
2 3	Forklore and Fairy Tales. Robinson Crusoe. Sacred Profane. Patriarchs and Thuringian Ta	les	Mythical and Heroic Mind.
	Julges and Kings Vibelungen Ta L.fe of Christ. Christianizing Kaiser period. Life of Christ. Kaiser period.	d d	Mediaeval Statebuilding. Historic Mind.
R	Paul Reformation Luther Nationalization	ח	Soc.al and Political Developm't Scientific & Philosophic Mind.

h We should not close this discussion of what German thought has done with the doctrine of the culture epochs before noting that one German philosopher of quite a dif

ferent school from the foregoing has approached very close to this theory, through not consciously advocating that it affect the sequence of materials in the curriculum on the basis of a parallelism between racial and individual devel This is Rosenkranz, who in his "Philosophy of Education" points out that from an intellectual point of view the child passes through three chief psychical epochs. in an intuitive epoch. sense-perception predominating. (2) ar inaginative epoch, (ancy and memory predominating, and (3) a logical epoch, abstract and organized forms of thought coming to the front He also points out that these epochs must influence the method of instruction and the selection of the materials of instruction. A step further would have brought him to the conception of the parallelism wound make brong at mail rothe conception of the parametran by no with racial or national development to comparison by no with raciar in nacional development of comparison by no means altogether out of harmony with Hegelian thought). since the psychical epochs of the individual as presented by Rosenkranz find their close analogies in generic evolution. The race is at first wrapped up in its world of pure sense perception (intuitive epoch); as soon as naive comparisons begin to work upon this raw material it enters the imagin ative epoch (first mythical and then legendary); and as the thought processes themselves are brought under greater control, it enters a logical epoch, one in which the products of history, philosophy, and science come successively to the This brief series of epochs as presented by Rosen Kranz is at once seen to be very similar to those that Vogt and Hartmann have furnished, at least as to the movement front

10. The recent work of at least one American author especially deserves mention as it throws great light upon the subject. Trefer to the new volume of J. Mark Bald. in intellectual evolution wm's, entitled, "Mental Development in the Race and in the Child." Prof. Baldwin points out in his opening chap. ter "that certain great epochs of functional differentiation may be clearly seen. Prest, the epoch of rudimentary sense processes, the pleasure and pain process, and simple motor adaptation, called for convenience the affective epoch; second, the epoch of sensation, memory, mitation, defen-

one action, instinct, which passes by gradations into, third, the epoch of complex presentation, complex motor coordination, of conquest, of offensive action, and rudimentary vontion. These, the second and third together, I should characterize on the side of consciousness as the 'epoch of objective reference;' and finally, the epoch of thought, redection, self-assertion, social organization, union of forces. cooperation; the 'epoch of subjective reference,' which in human history merges into the 'social and ethical epoch.'" Without following this author further, we may merely call attention to the close resemblance that these epochs bear to other statements of the theory already noted, although we should add that this author deals in detail with fewer years toan those who seek to establish the theory for educational p rooses and hence with not exactly the same problems. it sentire work, however, is devoted to a much more minute discussion and tracing of the analogy between ontogeny and Hoogeny, especially in the earliest stages of mental developenent and to an exposition of the modifications of the work of recapitulation by "the continued application of tre principles of organic habit and accommodation."

Many more references might be given to other authorthes that have found the theory both rational and practical and who have contributed valuable investigations toward establishing it on a more scientific basis. These efforts have will mainly directed, however, to the years of the infant, whereas the educator has need of light all along the line from the moment of birth mor will we exclude what is chewn of the life and development of the embryo, so far as is an be of any use to the educator), up to and through the broad of adolescence. Here is a psychological task that is no means accomplished; side by side with its solution st be placed the labors of another line of specialists in "harative instory and culture. The results of these two sof thought may, then, one day tell us whether or not a have minute establishment of the theory of parallel indiand racial development is possible. At present we "sgaged with the question of whether there is sufficient once of its truth to warrant its use as a factor in an educational system. Before attempting to answer this question positively, let us first note some of the more important among those who object to its use, either in part or in whole.

1. Lange, one of the strongest Herbartians, while conceding in his work on Apperception that this is the only principle of succession that offers a rational basis for sequence, is still constrained to take the illogical position of objecting theoretically to the theory as a whole. He finds that it is pedagogically suggestive and valuable, but theoretically without basis. (We should add in justice, that in the supplement to the Yearbook of the Verein fur wissenschaftliche Paedagogik, No. 21, p. 29, which appeared at a later date, Lange disclaims ever having intended to deny the great analogy or to reject it as a principle of selection: but he wishes merely to have it recognized as but one principle among others, a claim that few advocates of the principle will be inclined to deny.) Lange's chief objection is based on the idea that it is necessary, if the theory hold good, to parallel years in the life of the individual with race epochs—an idea which as we have shown is entirely unnecessary and even contradictory to the conception of development. This misapprehension is a relic of Ziller's curriculum which has been greatly changed for the better since his time. We need, then, dwell upon this point no further.

A further argument of Lange's is that no child has completed its moral development at the close of the school age. This is true. But neither do we find anywhere in history or in the present a rounded or completed ethical and social development of a people. The best that either can have at this stage of development is an ethical and social ideal and the earnest struggle to attain it. At this point we may well be content with placing before the individual the problems that he, as one of a social community, must help to solve. The cultivation of ethical appreciation, ethical tastes, and ethical ideals, however, may—in fact, always does—precede their full realization.

Finally. Lange points out that the child is born into the world with a constantly increasing treasure of inherited tendencies. True; but this is only ascribing to embryolog

ical development what otherwise would belong to post-natal development, a fact that after all does not materially affect the work of education. In his final conclusions, as already noted, Lange stands firmly for the recognition of the principle as parallel with others.

- 2. A further objection comes from Von Sallwuerk, in his 'Gesinnungsunterricht und Kulturgeschichte;' it is also essentially a reaction against the arbitrary establishment of definite boundary lines in the unfolding of the individual. Von Sallwuerk distinguishes between a so-called genetic and organic point of view in the structure of the curriculum. According to the latter, Von Sallwuerk's own preference, the curriculum is determined by the organic growth of the nner man (i.e., of the spiritual man). This view, however, is exactly one-half of the theory of the culture epochs. The omission of this half would imply as narrow and inefficient a grasp of the theory as the omission of the other. Education, as the life-unfolding process, presupposes harmony and sympathy between both the child and the educational means.
- 3. Prof. S. Patten, of the University of Pennsylvania, a his excellent article on "Economics in the Elementary Schools," (publications of the Am. Ac. of Pol. & Soc. Sc., No. 138) attacks this theory from a different, though practical, ment of view. He points out that the argument often advanced in behalf of the culture epochs, that modern life is too complex for the child to grasp, and that education, therehere, must begin with ancient materials to get initial simpucity, is weak; and in one sense he is quite right. As Prof. Patten well shows, the sickle is not simpler to the boy than the harvester so long as both represent to his mind the proress of reaping. The same would be equally true of the most complex piece of social, industrial, or political mechlaum, as long as the child can see what it accomplishes. The argument holds good, however, only so long as we contemplate the mechanism merely in the performance of twfunction: let it once become the object of analytic invesstation of structure or of development and the case is re-"rised. Then the sickle is simpler than the harvester, and I way such analysis that the object is understood by us.

Prof. Patten points out furthermore (and with justice) that there are to-day abundant concrete examples all about us of the truths we seek to draw from older materials. He might have gone further and shown that the possibility of any grasp of past cultural pictures whatever depends on the extent of the child's experiences in a present environment. and in so far he would have been a true exponent of Herbart's. But none of these objections touch the true kernel of the argument for the culture epochs, viz., the succession of interests, volitional attitudes, and forms of thought activity in the child. We would take issue with Prof. Patter also in his attitude toward past culture. While most heartily in sympathy with his endeavors to touch mankind into a more active and practical harmony with modern ideals and modern problems, we find it difficult to distinguish so antithetically (so to speak) between modern and past culture. The past is an essential element in the humanistic culture of the present. The problem is not merely one of ethical and social experiences in the present, but equally of full ethical appreciation, thought, and inspiration. Let us once begin to have greater interest in any modern institution, invention, or spiritual ideal than is called forth by simply witnessing the performance of its function (i.e., let us but make it an object of scientific investigation), and we shall not know it, appreciate it, or value it aright until we have it in its historical setting.

C. SUMMARY OF THE CULTURE EPOCH THEORY.

Our own attitude toward the Theory of Culture Epochs has been so constantly indicated, though often negatively, throughout the foregoing historical and critical review, that it will be unnecessary to enter into more than a summary of the conclusions that may at present be fairly drawn for educational purposes, in the light of present knowledge and present applications.

Is there a parallelism between racial and individual development? We should answer that if by this parallelism is meant, as many seem to think, a recapitulation of

all the errors as well as the successes of the human race, that is, if we look for the repetition of specific products of development as seen in the race at any given age, no. But if, on the other hand, we seek a parallelism of general psychical traits and functions, yes. This distinction between a parallelism of distinct products of development (such as the brigand, the cowboy, the pirate, etc.) and a parallelism in the development of the psychical functions underlying these very products, must be insisted upon here, since many have attempted to argue this problem on a basis of the former, a method of precedure manifestly unjust. These are two very different things. The "exaggerated individgalism" of the cowboy, as it appears to the eye of social order, is, after all, the product of one epoch of psychical development through which every healthy boy passes, though generally without becoming a cowboy; it may be that the passage is made in his literature, in his play, or in his work; it may express itself in a variety of products totally unlike that of the cowboy, and the "exaggerated individualism" may be made the source of a healthy development in the boy just as has been the case in the history of the race For "exaggerated individualism," which was so character stic of the early Teutonic race, was the source of modern ideals of treedom and of American institutions. So, too, may it be converted into power in the individual, if seized upon and utilized. We must insist, then, that we are dealing in this comparison not with the products of development, but with the development of mental functions that have brought about the products.

If, now, we compare child and race briefly from the intellectual point of view we find that both at first exist in a stage in which sense-perception still consumes the greater part of all mental power. The all-absorbing mental occupation, if either can be said to be mentally occupied, is the acquisition of sense-experiences in a constantly increasing proportion of definiteness and accuracy. It is striking that in this stage both child and race are usually alarmed, or at least painfully affected, by new and wholly unfamiliar sensations. For example, both are very similarly affected by

the movements of objects, the nature of which they do not yet quite understand. —the child by the motions of a black hat that seems to approach it by its own will, the race by such forces of nature as the thunder and lightning, the wind, or the sighing trees. What we call the superstitious fear of the savage race thus finds its parallel in the fears of the child in its earliest years; neither can be approached by the stranger without exciting fear and the efforts at flight or defense. Fetichism and idolatry are products of this epoch in the race

The first form in which the mind begins to react originally upon the materials of sense-perception is that of fantastic imagination, which is in reality the result of naive comparisons made by the mind that either does not or will not realize the laws that are immanent in the world of sense. The child and the primitive race simply do not realize these laws as yet, and hence as soon as either begins to reproduce its fund of sense-materials in any other than the order of mere sensuous association in space and time, it does so by the comparison of extreme experiences. It is this naive, flighty comparison, based on slight, extrinsic similarities in widely different experiences, that, in both the race and the child, results in the product we call the myth. Appeal to almost any child for his explanation of the phenomena of nature about him, and he will be found to have just such conceptions, resting on the comparison of extreme experiences, as are to be found in the mythology of past peoples. This epoch in both child and race is further characterized by the first clear conception of God as a higher personality; the former undoubtedly draws his idea of divine power, excellence, and authority first from the traits of the parents, in whom he finds embodied the highest character he can imagine: the latter seek in its gods those traits it has learned to admire and respect in its great leaders. Hence arises that striking parallelism between child and race seen in the anthropomorphic conceptions that both first possess of the deity.

But it should be noted that there is nothing mystical or even unaccountable in the parallelism of this stage of deveropment. It arises from the very nature of mental growth that both child and race should first indulge in a mythical and symbolic interpretation of the world about them as well as in an anthropomorphic conception of God. It is a long road from the mass of sense-impressions with which each must begin its intellectual life to the realiza tion of the laws of the universe these impressions imply. laws that only the trained and skilled human intellect can determine, or has ever determined. The first processes that will begin the systematization of this mass of raw material will necessarily be more or less dependent upon the forms in which it was first acquired, space and time; and the first comparisons that the human intellect will therefore be able to make, will still cling to these more or less sensuous forms. So primeval man sees in the clouds above him not an evidence of the ever active law of gravitation and the effects of the heat upon water, but a likeness to a flock of sheep, which in time becomes as a reality to om. And the child, witnessing the gradual disappearance of the smoke into the dim vault of the heaven, decides that the smoke makes the sky (and is not so far from the truth). See "Thoughts and Reasonings of Children," by H. W. Brown). The same is true of the anthropomorphic conception of the deity; it lies in the very nature of things that the child and the early race should place back of the active phenomena of nature a force, or better a will, like that it exercises itself. Then when the conception is to be supplied with definite attributes (and, in fact, there is probsolv no separation of this process possible, except in the analysis) dependence upon sensuous images requires that it be first grasped in the human form, as that respected most bachly (i. e., in this stage), and that all attributes assigned to the personality, thus anthropomorphically imaged, will * drawn from those in human life most admired and adored. the God be one of good, or vice versa, if it be the evil This development permits of a great variety of moditotions, of course; we have stated it here in its simplest terms for the purpose of showing that thus far at least be parallelism between the development of the child and be face lies in the very nature of things.

It is equally natural that the race and the child should both closely associate with their thoughts of divine beings and heavenly events and institutions the personal affairs of their own lives and those to whom they are accustomed to look up in society. Indeed this is only an expansion of the anthropomorphic tendencies of conception already noted. Little by little the affairs of the Gods, as tradition ally handed down, are mingled with the actual events of man until, approaching the border land of history, we meet with the legend and the semi-mythical hero, which find their counterpart in the hero-worshiping age of the child. From this time on there is the constant but gradual transition to the epochs of historical and philosophic thought in the race, or to the stage of rising understanding and sov ereignty of the reason in the child, with the accompanying refinement of the emotional life and development of the in terests.

Thus the general forms of intellectual development in the child and the race are seen to be parallel in certain great and significant features. These features are such as affect very materially the work of education, as we shall endeavor to show later. But besides this formal side there is a material side to the parallelism. That which the race from age to age has achieved in its distinctive culture must be transmitted to the rising generations. Each age sees this culture advanced beyond the preceding wherever ind. viduals can be found who have so far grasped the development of the past and the situation of the present as to become prophets of future needs, to place new ideals before the people and inspire them to attempt their realization. But the possibility of progress depends primarily upon those prophetic individuals who are able to concentrate in a single moment the teachings of all the past. What is true of the seer is almost equally true of the people that is to follow his lead to a higher plane. On the basis of its past it must be able to follow its leader, to apperceive with him the need of the moment, that it may act intelligently. Hence the need of some regard for the material side of past development. Each individual finds in this material the

same series of apperceptions that belonged to his people. The child that follows the historical development of his people is, therefore, recapitulating mentally the national stages of growth. And he is educated, in fact, to this very end, that when he steps out into the larger community, called the state, he may consciously and intelligently stand upon the cultural and practical plane of his people, with his face turned toward the problems of the future. Thus the very materials of individual growth are, in themselves, a partial cause of the recapitulation of generic development by the individual.

Thus far our brief review of the general lines of parallelism has been confined to the intellectual movement in growth. Another line of comparison is furnished by the practical or volitional development of both race and child. Let us see whether the theory has any application here.

This question might be answered by referring to the analysis of either Vogt or Hartmann, both of whom point to about the following lines of similarity: Both child and primitive man start with certain more or less uncontrolled unpulses, the raw material of a future will-activity that, as vet, can hardly be said to exist. Primitive man certainly learns to control his body because of the need of providing for the wants of life, but beyond this his acts can hardly be said to be under the control of either mechanical principles or the reason. The same is true of the child. Hence both are characterized by caprice of activity, fickleness of purpose and a greater or less subjection to the natural appettes of the body. The latter, as the necessary safeguards for the preservation of the species, are about all in the acturty of either child or primitive man that can be said to be persistent and never failing. Yet the appetites are to both child and race sources of error, that sooner or later require subjection to the dictates of reason. In this stage, the race and the child are both more or less helpless, dependent upon the volitional strength of others; in childish trust the former looks to the chief or to the patriarch for studance, the latter to the parents. The epoch of the rule of the impulses, therefore, passes on to one in which there

is childish trust in the will of a stronger and more complete personality, though the latter as yet dominates but a narrow circle. But even here there comes a time in the life of every child when the authority of the parent or educator is questioned. There is rebellion, more or less outspoken, to that which has hitherto been accepted as the model unquestioned. Now the child has to learn the lesson of just law and sooner or later to subject himself to its authority, at first because it is law, and then because he is able to see into the moral beauty of the law. With this moral insight comes voluntary self commission to moral ideals and the individual may be said to have realized the ethical requirement of inner freedom. So, too, the people rebels against the petty chief or the patriarch, because, as in the child, the feeling of self-power has gained strength. But it has always had to learn the lesson of law, to grow up into the larger power of the state, in order ultimately to become autonomic, to voluntarily commit itself as a body to ideals of social and political advancement.

Has there not been a development in the will activity of mankind, and must not the child at least reach that plane of moral consciousness that has become the ideal of his people. If so, it is equally true that the ideas of absolute duty toward mankind, as conceived by Kant and Herbart, the practical realization of which nations are gradually approaching, of the absolute beauty of the moral law, of Christian service, cannot be handed over to the child directly as the adult conceives of them, but must be reached through a process of development (comp. the analysis of Hartmann). This development is, by the very nature of the case, the parallel of that followed by the race, so far as the main features are concerned. Every child takes his first step toward the conception of the absolute beauty of the moral law when he comes to understand that it pays to be good, and to be good because it pays. Yet this is a eudamonistic standpoint, which we do not wish to see him perpetuate. though we realize that it is a natural step. In the "Autocrat of the Breakfast Table," Dr O. W. Holmes strikes this thought in referring to "truth as the chiefest among virtues." After making that classic comparison of the cube to truth and of the sphere to falsehood, he says: "But education always begins with the senses, and works up to the idea of absolute right and wrong. The first thing the child has to learn about this matter is, that lying is unprofitable; afterwards, that it is against the peace and dignity of the universe." Again, we may say that this parallism lies in the very nature of the case; both race and child have a certain endowment of impulses and appetites, which constitute the raw materials of volitional life. The form of development through which each passes in converting the raw materials of volitional activity into rational will-power are in general the same.

We have been forced during this comparison to make constant use of such expressions as "in general," "in the main features," etc., in laying claim to any arguments in behalf of the culture epoch theory. We have done so for two reasons: 1, there are certain deviations to which the law is subject, and, 2, as long as we are forced to recognize the presence of individuality, distinctive personality, in human beings, all educational principles will have to be content with laws that are subject to the variations of individuality and that can yield gracefully to the distinctive needs of the individual. But what are some of the variations to which the law of parallel racial and individual development is subject? Or, more correctly stated, what are some of the factors that modify the application of the law and limit the extent of its application?

The first of these limitations depends upon the fact alteredy noted in speaking of the objections of Lange. If the awa of evolution are accepted, we must admit that children are being born into the world with a constantly increasing store of possibilities. The past and present achievements of the race are constantly affecting the fibre of its present representatives; hence the treasure of stored up tendencies with which the child is launched into the world is constantly increasing. This factor, which bears chiefly upon the physical endowment of the race, cannot affect the work of education materially so far as it deals with the problem as a

whole; but the case is different when we consider the individual. There can be no doubt that different individuals are born with very different capacities, both qualitively and quantitively. Hence one will be able to recapitulate the development of the race more rapidly than another, or will, perhaps, reach an advanced stage by some short cut. This brings us to that troublesome problem of the conflict between the individual and the curriculum. If there is to be open to each child the possibility of free development and free movement within all educative means and activities, both the curriculum and system of gradation must yield before the needs of the individual. For this reason we have objected to the establishment of any definite and arbitrary boundaries, at least in application, between the different culture epochs, and for this reason we have ourselves refrained from either setting boundaries or fixing any definite number of epochs in the child's development. If the curriculum and the system of gradation are elastic, if we content ourselves with beholding the general movement in the parallel development of the child and race, and regard all arbitrary boundaries merely as analytic conveniences, we shall find that the culture epochs admit of practical application without conflicting with the demands of the individual.

But a second factor affects the parallelism to a much greater extent. This factor is environment. Environment not only produces a variation among individuals, but also affects the stage of the child's growth that we desire to parallel with a certain epoch of the race. The child of today is born into a world that is very different from that in which the race lived in many of its epochs. He finds daily exemplified about him higher forms of social life, higher moral ideals, and more perfect social and industrial adjustments. In other words, the environment into which he awakens is the product of the last stage of the development of his people. To begin with, therefore, his world of sense-impressions is essentially other than that which the early race experienced. At the outset, then, the material side of the development is certainly different, and this fact, as Professor Patton has emphasized, should not

be forgotten. On the other hand, the formal side of the development, the form in which the mental growth of the child takes place, the powers we have to utilize and the order of their development are the same in their general features, as we have shown, and it is these with which we have to deal. On the contrary, as we approach the closing stages of development it becomes more difficult to trace in detail the parallelism of unfolding powers, whereas the material side of the parallelism constantly becomes more and more apparent, since the child is nearing the epoch of the present, whose material products he can behold.

In concluding this part of our discussion we may say that there are certain very distinct and striking parallel nes in the development of the child and the race, both from the formal and material points of view. These parallel lines are traceable in the intellectual, emotional, and contional development of both. The parallelism of development is limited to certain chief general features of intellectual, emotional, and volitional growth, chiefly because of the influence of a changing environment.

b PONCTION OF THE CULTURE EPOCHS IN A SYSTEM OF EDUCATION.

Why should the theory of the culture epochs be considered at all in a system of education? Has it any essential educational function to perform, or is it a superfluous doc true at least so far as the problems of education are specified.

The place any educational principle shall occupy in a sistem of education will be determined largely by the end that system has in view in undertaking the work of education. The center of interest in this life is human activity and managrowth. In these all culture centers; all culture in the either directly or indirectly upon human action. But the is more than this, it is a power for action, and the last that it may be used either for good or for evil demands that it be handed over to the rising generation in the light at aleaf ethical personality. In fact, it is the ideal

ethical personality that puts the highest meaning and purpose into the body of culture. It appears, then, that the end of life is moral and religious excellence in the broadest sense, and that culture is but a means to this end, not an end in itself. But education, which is but a systematic effort to further the unfolding of life's powers, can have no less an aim than life itself. No educational aim is safe that does not recognize moral and religious strength of character as the paramount factor in the educational result. Be this our aim in education,

Strength of character implies not only the creation of ethical tastes and the formation of ethical ideals, but the development and exercise of ethical power in action. He is ethically strong who not only knows the good, and admires the beautiful act, but who defends it in the presence of the adverse judgment, and seeks ever to realize it in his own deeds. But the field for ethical action is not narrow; nor is it confined to those daily acts in the contact of man with man that through frequent repetition become more habit than ethical effort. There opens up before the youth of the present rising generation a vista of future ethical problems, a field for future ethical effort, of which past generations have never dreamed.

Our very culture, our highly developed human institutions, our industrial development, our social struggles, our new and more perfect application of the laws of the universe, all complicate the ethical problems of the future as never before. What democratic people shall be able to grapple with these questions, but that one in which every individual is in possession of the situation as we see it to-day? It is incumbent upon us so to educate each child that enters and passes through the eight grades of the common school (and we shall discuss no others here,) that he shall know both the worthy ends of personal, social, and national action, and the means that must be utilized in realizing these ends. The latter must be grasped in the light of the former But how shall this educational end be brought about? In the presence of this question we are forcibly reminded that no knowledge can be handed over to the child directly as a

inished product, but that, as Gothe has it, he must earn it anew again to possessit; and (2) that the body of culture, quantitively considered, lies beyond the complete mastery of any individual, though he be a universal genius. In other words, we must recognize (1) that the appreciation of the present situation and needs in human affairs, can only be the result of a natural growth in the child, and (2) that we must limit the work of education in the common schools to the presentation of type-wholes of subject matter.

W T. Harris in the Educational Review, for June, '93, says to the above point: "But no philosophy of education is fundamental until it is based on sociology, not on physiology, not even on psychology, but on sociology. The evolution of civilization is the key to education in all its varieties and phases, as found in family, civil society, state, and church, as well as school."

There are two means of education that combine to make the teacher a power in character building; they are guidance sincluding the entire fields of training and government) and instruction. It is mainly through the latter that have exerts its effects upon the character (and becomes thus the chief supplement of guidance). When viewed in the light of its bearings upon the character of the child we are accustomed to refer to instruction as educative, or, as Degarmo has it, instruction that makes for character. This new of instruction recognizes the power of the idea; not of the cold and indifferent, or purely logical idea, but of the did as infused with the warmth of a refined emotional life. Such an instruction, therefore, implies not only the presentation of a given body of useful knowledge, but equally the culture of the higher emotional life.

It is the duty of instruction to care for the cultivation of tastes that are prompted by the loftiest emotions of the Luman heart; not merely those that depend upon the largence of esthetic relations for their food, but equally those that are called forth by the presence of high ethical locals. It is these lofty ethical ideas of the race and of the readers of the race, wrought into living power by the Warmth of holy emotion, that have moved the world to progress. This is the Herbartian doctrine of interest. As a pedagogical doctrine, interest is the immediate prerequisite of instruction. Without the live interest there can be no instruction of permanent value. It becomes, therefore, the immediate end of instruction. The selection of the materials of instruction must be such as will meet the requirements of interest, while at the same time looking forward to the final product, gathering by the way in the development of the curriculum all that will contribute toward setting the child morally, socially, and nationally on his feet. One after another the tributaries of the leading movement must be gathered in, but at that time in which the native interest and instincts of the child are ripe for them.

Two facts bearing on the nature of interest now demand our attention; (1) there is a growth, a development of the interests depending in part upon the effects environment has had upon the child, and in part upon the native emotional endowment of the child; (2) the character of the interest is also dependent upon the prominence of other mental powers, such as sense-perception, imagination, logical thought, etc., and develops as they develop. It is this mental genesis of the child that demands our consideration in the construction of the course of study. If we concede the presence of a development, certain phases of which we are able to point out with greater or less accuracy, we are at once committed to some principle of succession in the curriculum. We are forced to admit that there must be some principle found that will guarantee at least approximate correspondence between child and subject matter at the various stages of his development. Such a principle we have shown exists in the theory of the culture epochs. Each epoch, which has its characteristic culture products and ideals, corresponds in certain great and significant features to stages of development in the child. The cultural products of each epoch, therefore, will contain that which appeals most sympathetically and closely to the child. If this is not true, why does the early folk-lore of the people appeal so strongly to the child at a certain age? Why have our classic writers for children drawn so largely for their themes from the mythological lore of older days. Why do they seek to preserve so far as possible, in their literary form, the spirit and the atmosphere of the original source? Why is it that certain literary products appeal to us at one age and not at another? The writer well remembers the impression made upon him in his own stage of heroic and "exaggerated individualism" by Wordsworth's beautiful poem of "The Pet Lamb." It was one of profound and bearty disgust at the (at that age) seemingly sickly sentiment of the classic. How often it has been noted that there is a time when each literary product can be best brought before the mind for the first time. After that time it may come as often as its classicity can entice us; but before, it fails to appeal to us. This becomes then a serious problem for the teacher who undertakes to open to the child's heart the treasures of literature in the common schools How often do the Kindergartens and the early grades of the common school commit the error of presenting stories, for example, whose true spirit is above the child, imagining, because the child shows a degree of interest in the childish presentation of a lofty life whose ethical significance is far beyond his ethical ideals, that he either grasps the situation intuitively or will do so some day.

We believe, therefore, (1) that the principal of succession in the curriculum must be sought in the humanistic institutional movement in culture; that material which is selected on the principal of the culture epochs, will be able to call forth lasting interest in the child. (2) That the classic products in which the culture of these epochs is embodied must be the basis of the instruction. "Periods that no master described, whose spirit no poet breathed are of little value to the educator," (Herbart). (3) Great, connected and typical, fartions of the subject matter must be made the successive centers of interest. "Great moral energy is the effect of trut scenes and entire and unbroken thought masses," (Herbart) Finally (4) we believe that these successive typical thought masses must be so arranged as not only to conform to the requirements of interest in accordance with the culture rpochs, but also to reveal a clear picture of the growth and nature of our social, industrial, and national institutions, ideals, and needs, and to create a love for them and a lively regard for their welfare.

As soon as we come to determine the application o. this principle for the American school, we meet a new question of some importance. Where shall we let the early epochs of our people begin? Several answers may be given to this question. As a people we are chiefly of Teutonic origin: possibly we may find the proper materials by seeking among the early cultural products of the Teutons. a task that would by no means be impossible, since the early Teutons revealed very distinctly all the epochs we have discussed. Religiously we are Christian and might, therefore, accept the religious series as selected by Ziller or Rein from the history of the Israelitic race. But this is in direct conflict with an educational tradition we are by no means likely to relinquish at present. As to our language we are English, and here again it would be easily possible to find a complete set of materials for the different epochs. But as a nation we are American, and the demands of our institutions require of this people no less than any other an emphasis of national culture. As soon as the cultural development of the child reaches the stage in which historical materials are to predominate, therefore, they should be chiefly national. Before that time the folklore and mythical and legendary tales of other times than ours may well be used.

The only attempt, so far as we are aware, to make a practical application of the theory of the culture epochs to American conditions is that of Dr. C. A. McMurry, at Normal, Illinois. (Comp. his "General Method" and "Special Methods in History and Literature," in "Reading," and in "Geography.") Dr. McMurry gives the following series of materials for the different grades: First grade, selected folklore stories; second grade, Robinson Crusoe; third grade, classic myths; fourth and fifth grades, pioneer history stories, setting forth the heroic age in our own history; sixth grade, the period of settlements, of colonial history, and of the French and Indian wars (state-building, together with the following grade); seventh grade, the Revolution

and life under the Articles of Confederation till the adoption of the constitution; eighth grade, self-government under the constitution and the growth and strengthening of the federal idea. This entire movement, which upon comparison will be found fairly to reproduce the intellectual and volitional movement of the culture epochs, is then strengthened by the national products of culture that are brought to light in the work of reading and literature for the purpose of completing the picture of the national development. No less an authority than Horace E. Scudder has expressed the idea that contact with the literature of the nation contributes directly to the true national feeling and national spirit. In his "Literature in School" he says: "The deposit of nationality is in laws, institutions, art, character, and religion; but laws, institutions, character, and religion are expressed through art and mainly through the art of letters. It is literature, therefore, that holds in precipitation the genius of the country, and the higher the form of literature. the more consummate the expression of that spirit which does not so much seek a materialization as it shapes itself inevitably in fitting form."

The further development of the separate branches on the plan just illustrated belongs to the province of special methods. We have but space here to indicate the lines of application. Side by side with the national historical matehals may be carried a line of reading in connection with Interature that will acquaint the child with other essential and non-national materials, thus supplementing the others. These also should be selected on the basis of the culture epochs. The geographical series permits of easy and natural connection with the historical; from this point of view It serves to give a picture of the stage of human action, of the structural basis of human history and institutions. The senes of natural science, we believe, may adapt itself to the general movement of the rest of the curriculum by a judicious application of the principle of Beyer, by which the natural sciences are related to the humanistic series through the bearing they have on the economic growth of the race. buch connections are of the nature of cause and effect, and

hence intriusic, while at the same time they do not need to affect the logical requirements within the subjects of natural science themselves.

The question may be asked. Is it expected that these cultural products, more or less typical of given epochs, are to be grasped as such by the child? We answer, at first they can but appeal more strongly than other materials to the child's interests, but as the historical instruction begins to open to the child a conception of the origin of the institutions that surround him, the past materials are gathered together in the retrospect, and their cultural meaning emphasized. To expect more than this would be to look for a violation of the principle of the culture epochs in the first years of the child's school life.

One of the effects of the theory we have been discussing is to furnish a principle for the rational concentration of the various branches of instruction. The "leading motivo" of the curriculum, or the central core, will then be neither science or history, but rather the sum total of humanistic materials so arranged as to center in the developing personality of the child. The developing personality of the center of all efforts at concentration. The child's developing interests, instincts, and mental powers, together forming the axes of all educative efforts about him, call for the humanistic movement furnished by literature, history, and art.

Another effect of these epochs, when applied to the course of study will be to remove the old plan of arrangement in what has been called concentric circles, i.e., at first, a presentation of the outline of a subject in a primary textbook, then the enlargement of this skeleton outline in a fuller presentation of the same subject, and finally a still fuller presentation, in a third text-book. This old method of procedure, which was a crude attempt to meet the requirements of the developing powers of the child, is deficient for several reasons, which we may sum up as follows:

1. It requires the breaking up and reconstruction of ideational series once formed, and is in so far a waste of time and mental energy.

2. It is destructive of the interest, for

the pupil can not find in the repetition of the same material once acquired, with an intersprinkling of new data, the same intrinsic interest in the thought itself as before. 3. An epitomized presentation of an entire subject is necessamly highly generalized; to place such an epitome first, therefore, is to attempt to reverse the natural order of thought. But the application of the culture epochs permits the natural course of thought, and, while at the same time meeting the requirements of interest, offers the most fruittal opportunities for review, viz.: by requiring the repetition of the old material under a new light and prompted by new interest. It is thus, in fact, that we are led to repeat our mental experiences in practical life and why should the thild be asked to do otherwise? Furthermore, in that they way with dead repetitions, they at the same time afford time for the presentation of a subject with the necessary accompaniment of detail (and how often our primary instruction becomes verbalism, because we content ourselves * tha mere sketch that can call up no vivid images to the mind of the child).

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W. Micry: General Method. Special Methods in History and Leasture, Reading, and Geography. Bloomington, Ill.

In tearmo A Working Basis for the Correlation of Studies. Ed. Rev. May, '93, Herbartian Pedagogics; Ed. Rev., Vol. I.

Puten Economics in Elementary Schools. Publ. of Am. Ac. of Po. and Soc. Sc., No. 136: Phil. 1894.

Soulder Childhood in Literature and Art. N. Y. 1894.

PLAN OF CONCENTRATION

FOR FIRST TWO SCHOOL YEARS.

MRS. LIDA B. MCMURRY, STATE NORMAL UNIVERSITY OF ILLINOIS.

FIRST YEAR.-LITERATURE.

First Term. Full.

- 1. The Old Woman and Her Plg.
- 2. Little Red Riding Hood.
- 3. The Anxious Leaf. (Beecher.)
- 4. The Three Bears.
- 5. The Lion and the Mouse. ("Esop.)
- 6. The Little Match Girl. (Andersen.)

Second Term, Winter.

- 7. The Fir Tree. (Andersen.)
- 8. The Four Musicians, (Grimm.)
- 9. The Discontented Pine Tree.
- 10. Cinderella.
- 11. The Coal of Fire, the Bean, and the Straw. (Grimm.)

Third Term. Spring.

- 12 The Bird with No Name. (Grimm.)
- 13. The Proud Apple Branch. (Andersen.)
- 14. The Ugly Duckling. (Andersen.)
- 15. The Pea Brossom. (Andersen.)
- (a) These stories, as a whole, are simple, lively, and imaginative, and call out a strong, spontaneous activity of the children.
- (b) They deal with social relations and personal conduct, and also with interesting forms of plant and animal life.
- (c) The first story appears very fantastic and unreal to many people, but experience shows that it has peculiar attractiveness and interest to children. Its simple repetitions make it easy to grasp and reproduce.

Several of the selections, while possessing the merits already mentioned, are suited to certain seasons and are used at those times; thus, the time of teaching "The Anxious Leaf" is determined by that of the falling of the leaves in the autumn. "The Little Match Girl" and "The Fir Tree" are both Christmas stories; the one is taught immediately before, and the other soon after the holidays. All the stories taught in the spring are specially adapted to that season of the year.

NATURE STUDY.

First Term. Fall.

1 (a) The Shepherd Dog.

b. Cow.

(c) Sheep. (By comparison with the cow.)

The principal objects studied are types, and while the children do not recognize them as such in this grade, they do get a very vivid perception of the characteristic typical notions which these animals illustrate, e.g., the dog is the type of dignigrade carnivora. The children in its study are surprised and pleased to find that it walks upon its toes. As this is the first animal studied, all comparisons are made with themselves. They like to try walking as a dog does. Its manner of eating also interests them. They see that its safge tearing teeth are well adapted to devouring the kind of tood it likes to eat. They do not need such teeth, for they have knife and fork; and besides, their food is cooked so that it is easily divided.

In the study of the cow, one of the most interesting to mis noted by them is its manner of walking on its pairs of toe nails, or hoofs.

The teacher may well keep these type forms, based teally upon scientific classification, clearly in mind, not for the purpose of imposing them upon the children too early, but to point out to him the centers of observation for children in later years, of course, these type studies will lead up to scientific system.

The dog and the cow are two central characters in the story of "The Old Woman and Her Pig."

Another reason for choosing the dog is because every child in the class is familiar with and interested in it. For this first study at least, while the children are timid and inclined to feel school restraints as burdensome, it is important to study an animal about which all have something to say, which they will express without realizing that the school is so totally different from the home.

The shepherd dog is chosen because it is the one most commonly used in driving animals. The diversity in the appearance and character of dogs is so great that to study the dog would be impracticable, for while one child is thinking of a Newfoundland another might call to mind the poodle. The species familiar to the greatest number may well be chosen.

The cow is as familiar as the dog to all country children, and the city children should become acquainted with a friend to which they owe so much. No child after being in school a year should have such a vague notion of a cow as to describe it as "no bigger than my thumb nail." In many cases, by a little trouble, the city children may be taken to the suburbs to see a cow. It would be worth much to them; but if this be impossible, by the aid of good pictures and comparisons with animals familiar to them, a definite idea may be arrived at which will enable them to recognize immediately a cow which they may see later.

Usually it would seem best to study no object which cannot be presented to the class. Is not the cow an exception to the rule on account of our dependence upon it for so much of our food, clothing, etc.?

For reasons similar to those given above, the sheep is studied by all children, but let the teacher be sure that it is impossible to see the object before studying it otherwise.

2. We should hardly recommend the study of the wolf in connection with the story of "Little Red Riding Hood." In the first place, few of the children have seen a wolf or will be able to see one during the study. Secondly, those who do see it know little of its habits in a wild state, and it is the home life of an animal that is particularly interesting to children: thirdly, children are not dependent upon the wolf for either the luxuries or necessaries of life.

3 Preparation of familiar trees with large buds, as bickery, walnut, buckeye, and various poplars, for winter rest, this study to be associated with the gathering of autumn leaves. The connection between the anxious leaf and nature study is here a very close one. The leaves stay on the trees as long as needed by the buds. When the coverings of the latter are complete so that they are no longer dependent on the leaf stalks for protection, the gaily colored leaves take their well-earned holiday.

4 For reasons under (2) it seems hardly advisable to teach the bear unless the children are familiar with its nabits.

5 The story of "The Lion and the Mouse" suggests among animals the growers—the mice—but in treating this group of animals with children the fox squirrel is a better type than the mouse. It is evident, therefore, that while the stories suggest the class of animals the scientific type suggests the better animal for treatment than the stories. The selection of the (a) squirrel as a type study for children depends therefore upon both literature and science. Concentration of studies does not bind us down to any slavish control of one study by another, but it leaves us free to select the best topics that literature and science either separately or in combination can suggest.

The nut-bearing trees previously studied, as indicated under (3) furnish an interesting introduction to and connection with the study of the squirrels, which, about this time, are laying in their winter stores.

(b) The rabbat is familiar to most children. By comparison with the squirrel the study deepens in interest. The rason is also favorable, as the wild rabbits are abundant the country, and their tracks in the early snows are a curous study.

The rabbit was also a friend to "The Fir Tree," about which the children learn early in the winter term.

(c) The mouse (by comparison with the squirrel). The children are probably more familiar with the mouse than with squirrels, and enough of its habits have been brought out in a fanciful way in the story of "The Lion and the Mouse" to make this common, despised object a welcome subject of study.

Second Term. Winter.

7 and 9. A winter study of the most common evergreen of the locality providing it be a good type of this class of trees: this study in connection with the stories of The Fir tree and The Unhappy Pine Tree.

Second Term. Winter.

7. and 9. A winter study of the most common evergreen of the locality, providing it be a good type of this class of trees; this study in connection with the stories of The Fir Tree and The Unhappy Pine Tree. (a) The Austrian Pine.— Its foliage; two kinds of buds, leaving the children to find out for themselves in the spring what each contains; the fully grown cone, with its tightly closed doors, which a warm atmosphere causes to open; the one-year cones, whose work is only half done; position of cones on the branches; color and character of the bark; general outline of the tree. (b) the Scotch pine, and (c) the Norway spruce, by comparison with Austrian pine, providing these trees be common in the locality where studied.

*. The story of The Four Musicians suggests the study of the donkey. But first we shall study (a) the horse, a cousin of the donkey, it being a better type of solid-hoofed animals. (b) The donkey (compared with horse). (c) The cat, whose characteristic habits have been brought out in the story. (d) The chicken, another of the musicians and a good type of birds. (e) English sparrow, and (f) Chickadee, by comparison with chicken.

Any other birds common during the winter time in the locality where studied would do as well as the two mentioned above.

Third Term. Spring.

11 and 15. Plant lima beans, sweet peas, and corn. We have heard about the bean that burst from laughing in the story of The Bean, the Coal of Fire, and the Straw, and shall find that beans burst when working in sober earnest. The sweet peas are near relatives, and we shall need a vine and some flowers when teaching the story of The Pea Blossom. The corn is planted that its contrast in growth from the seed, when compared with the bean and the pea, may be noted. (The gradual development of these plants from seed to flower and fruit is carefully noticed by the children.)

7 and 9. Spring study of the evergreen trees whose winter study we have noted previously—the development of the clustered buds of the Austrian pine into staminate flowers and new growth, and of the long pointed buds into new growth and cones; the office of the sap; uses of the root, trunk, branches, and leaves; seeds sown and manner of growth studied.

12 (a) The robin, our best known summer bird, took part in the contest for kingship in the story of The Bird With No Name, so also did (b) the red headed wood-pecker, one of our most showy birds. For study, any other birds would do as well. These are most familiar to the children in the locality in which this course is followed. The wren, owl and eagle are more prominent in the story, but the wren is a small bird, quite inconspicuous in color, and very frequently no child in the class knows it. Were it familiar to the children it would be desirable to study it. The owl may better be studied in the winter when material is scarce, and the eagle is not well known with us.

13 (a) Apple blussoms connected with the story of The Proof Apple Branch. The buds are studied from the beginning of the term, or at least these observations are begin before any change has taken place in the bud, and all decided changes are carefully noted by the pupils until the fruit is well formed or ripened. (b) Plum, and (c) Cherry, watched as above and compared with the apple.

14 (a) The Duck, (type of water birds,) studied in con-

nection with the story of The Ugly Duckling. (b) The Goose, by comparison with the duck.

READING.

First Term. Fall.

- (a) The stories which the children have learned and reproduced in first grade, together with the science topics, have often been made the basis of board script exercises in learning to read. The advantage of using these thought materials in the first reading exercises is that both the words and the thoughts are familiar and interesting to the children and they enjoy learning to read stories which have attracted their interest. This is the opposite of the formal drill on charts and in primers. The subject matter in these exercises is derived from topics treated in Literature and Science.
- (b) Reading, from a book, or printed page, of poems, rhymes, and songs previously learned by the children at home or in school.
- 1. (a) Bow, wow, wow, whose dog art thou; (a) Hark! hark! hark! the dogs do bark; (b) Pretty Cow, Jane Taylor; (b) The Cow, Robert Louis Stevenson; (c) Little Boy Blue; (c) Little Bo peep; (c) Mary's Lamb; all from Verse and Prose for Beginners.
 - 3. I am the wind and I come very fast.
- 5. (b) Bye, Baby Bunting, and (b) R was a rabbit; (c) Five Little Mice; (c) Hickory, dickory, dock, and (c) Some little mice sat in the barn to spin, from Verse and Prose.
- 6. The First Christmas, Emilie Poulsson; Snowflakes—Tap, tap, tap, what a tiny call, etc.; The Snow—Little white feathers, etc.; Heart of Oak I. also contains many of these rhymes.

During this term and the following terms, beginning about the fifth or sixth week of school, the children spend a few minutes each day learning the sounds of letters, these sounds being derived by them from some of the words with which they have become familiar. Through their knowledge of these sounds they are enabled to make out words for themselves, and the second term they do considerable of the

reading without previous acquaintance with the story or poem

Second Term. Winter.

7 and 9. The moon and stars smiled down upon the little in tree of our story, in its forest home, doing all in their power to make it happy, and the snow-flakes made it a heautiful white coat.

The season also suggests the following: Star light, star bright: I have a little Sister, they call her Peep, Peep; and Twinkle. Twinkle Little Star; from Verse and Prose Lady Moon, Lord Houghton; I see the Moon; and O, Look at the Moon, from Heart of Oak I; Snowflakes—Whenever a snowflake leaves the sky; Pine Needles, Wm. Hayne; The Snowflake's Story, Nature Stories for Young Readers.

5 (a) Ride a cock horse; (c) Great A, little a; (c) Pussy at, pussy cat; (c) I like little pussy; from Heart of Oak I. Hev, diddle, diddle; (c) Ding, dong bell; (c) Three little kittens; from Verse and Prose. (c) Pussy sits beside the fire, Heart of Oak I; (f) The Little Chickadee.

Also the following of Æsop's Fables simplified:

(a) The Old Hound; (a) The Horse and the Groom; (b) The Donkey and the Wolf; (b) The Donkey and the Horse; Belling the Cat; (c) The Cat and the Mice; (d) The Hen and the Golden Eggs.

11. The Boy Bathing, The Bear and the Two Trav

Third Term. Spring.

11 and 15. A Little Brown Seed, When the Seeds Begin 'n Sprout; Child's Song Book; A Dewdrop, Stevenson; Phr Swing. Stevenson; Runaway Brook, Mrs. Folleno; From Verse and Prose. Drip, Drip, Drip, Child's Song Book. The April Shower, Who Likes the Rain, Clara Doty Bates, Plump Little Baby Clouds, One Little Cloud, Nature Stories for Young Readers, pp. 1-4, 10-12, and 28-33.

12 Nature Stories for Young Readers, pp. 12-14, 16, 17, 18-7 August Life, pp. 113-115; The Egg in the Nest, Who Store the Bird's Nest, Once I Saw a Little Bird, Who Killed

Cock Robin, The Bird and Its Nest, from Verse and Prose. A Bird Song. Heart of Oak I.. The Secret from Little Flower Folks. What Robin Told, George Cooper: The Nestlings, Laura F. Pollard.

13. The Dandelion Bright Little Dandelion; (c) The Cherry Tree, Bjornson; (a) The Child and the Apple, Elaine G. Eastman, from the German.

14 Animal Life, pp. 90-93; (a) The Chicken's Mistake, Phoebe Cary.

NUMBER.

For at least the first two terms of school there is no need of a class for number work. The children acquire number facts incidentally in literature, science, reading, and writing, thus. In Literature:

1. How many animals did the old woman go to for help? (The class count as one child names them.)

2. (a) How many things did Red Riding Hood take to her grandmother? (2) Show as many fingers as there were trees around the grandmother's house.

8. How many musicians were there in the band?

In Science the number of facts which may be learned without detracting from interest in the subject is great, e.g.,

I (a) Look at the tracks of the dog in the soft earth. How many toe tracks did the two front feet leave? The two hind feet? (b) How many long, sharp teeth has the dog in his two jaws? (c) On how many toe-nails does the cow stand? (d) How many front teeth does the cow lack in the upper jaw?

In Itending The children may be asked to read three four, or five lines or more. What is the third word in the second line? etc. Turn to page 12; it looks like this 12 (showing on the board).

In Drawing: Make a border in threes of your leaves: in fours; in fives. How many toes of the chicken can you see? Draw the toes as you see them. Draw the fir tree with six of its brothers and sisters. Draw some little mice running out to get their supper. How many did you draw?

In Writing and Spelling (second term): You may write the word sheep three times. How many letters in the word? How many sounds? How many silent letters in through? How many letters in the word?

Third Term.

- (a) A continuation of work as previously suggested for first and second terms. (b) Concrete stories based on literature and science given in a number recitation.
- 3 How many apple blossoms on this twig. (Eight.) You may have four of them. Harry How many have I left? What part of my blossoms did I give Harry? Give one half of your blossoms to Nellie. How many has Nellie? Nellie may give one-half of her blossoms to Ruth (c) Children learn to write the numbers which they recognize; thus: Tell me, without speaking, with the chalk, how many apple blossoms I have. How many I gave Harry. What part I gave Harry (4), etc. (d) Written language of operations. Show what I did with my blossoms (8-4), and also how many I have left (8-4-4). Let the chalk tell what part of my blossoms I gave Harry. (4 of 8), etc. The numbers used in this work do not exceed ten

WRITTEN LANGUAGE

write the word on the board and each child labels his cow. This work, of course, is very crude at first.) Later they write the word on the board and each child labels his cow. This work, of course, is very crude at first.) Later they write The cont, or the cow. They picture a pail of milk, and write the word milk below it. After learning to write a number of name words, they write short sentences, as "The cow gives milk," making a picture of the cow giving milk. It Copying of short poems or rhymes which they have rearned. The children in this grade learn how to begin and rad a sentence.

DRAWING.

- (a) Objects studied in science are drawn by having the object placed before the child, he doing his best to represent it. Some of these objects are molded, as the eggs and nest of the robin, beans and peas in the pod, the horse's shoe, the chicken's foot, cones of the pines. Some are also cut from colored papers and pasted, the children themselves matching the colors, as leaves on the twig of the apple, the ripened fruit of apple, cherry, and plum, beans in the pod.
- (b) The stories which the children learn are illustrated by them, they representing on paper what is in their minds, e.g.,
 - 1. They picture the old woman leading her pig, etc
- 2. Little Red Riding Hood is represented by them on her way to her grandmother's, meeting the wolf.

SPELLING.

(a) Phonetic and written spelling of words needed in the written language. (b) Sentences dictated by the teacher containing these words.

WRITING.

Second and Third Terms.

(a) Careful writing of the small letters which the children have already learned to write in words in the written language. (b) Combination of these letters into familiar words. (c) Exercises for free movement. Much of the work is done on the board where the letters can be written in a large form. The vertical script is used.

SECOND YEAR. LITERATURE. ROBINSON CRUSOE.

First Term. Fall

Chapters I 9 in Robinson Crusoe for Boys and Girls.

- 1. Robinson Crusoe at Home
- 2. The Voyage.
- 3. The Island.
- 4. Robinson's House.
- 5 His Work.

- Surprises. (Wheat found growing in his yard, and a turtle found on the shore.)
 - 7 His Sickness.
- 8. Exploring the Island. (He finds many grapes, melons, oranges, emons, and cocoanuts.)
 - " Another Trip. (He finds a parrot and takes it home for a pet.)

Second Term, Winter.

Chapters 10-20,

- 10 Robinson's Garden. (He finds salt also,)
- It and 12. Robinson Becomes a Cook.
- 13. He Becomes a Boatmaker
- 14 He Becomes a Tailor.
- 15 The Second Canoe.
- 14 Robinson's Flocks.
- 17 His Manner of Living.
- 18. Alarm'
- 19 Robinson Prepares for Trouble.
- 20 A Discovery

Third Term. Spring.

- 1 hapters 21 20.
- 21 Return of the Savages.
- " Making Friday's Acquaintance.
- 21 Robinson a Teacher.
- 4 Preparation for a Journey.
- 35 The Savages' Second Return.
- 38. A Happy Meeting.
- 3. Getting Ready for New Guests.
- 28. An English Vessel Arrives.
- 3 Home Again.

NATURE STUDY.

First Term. Fall.

Continue and finish the study of Lima Beaus, Sweet Peus, that then Finish study of Apples and Plums begun the pressure spring Metamorphosis of cabbage-caterpillur. If taken at the very beginning of the term, the eggs may be found, and all changes noticed until we have the butterfly. Metamorphosis of milk-weed caterpillar, and other caterpillars which the children may find.

(a) Wheat; (b) Oats. (By comparison with wheat): (c)

8. (a) Grapes and raisins. (Study of the ripened fruit on the vine. (b) Watermelons and muskmelons studied from flower to mature fruit; (c) Orange (As found in market); (d) Lemon. (By comparison with the orange.) (The trees of both of the latter will be available to many.); (e) Cocoanut. (Its manner of growth must be learned from pictures and by comparisons).

Second Term. Winter.

- 9. (a) Parrot, if the bird can be seen by the children; (b) Crow; Owl (by comparison with the parrot); (a) Snow Crystals—their history; (b) crystals of salt and sulphur; (c) Quartz crystals. Watch for and note time of return of spring birds.
- 12. (a) Watch for pussies on the willow. (Robinson made his baskets from twigs of the willow.) Notice the first changes in the buds of this tree and of its mate which bears the seeds. Notice all succeeding changes in both trees. (b) Notice, also, the development of the sterile and of the fertile flowers of the soft maple, and of its leaf buds. While in the willow the two kinds of flowers are found on separate trees: in the soft maple, the two kinds are found on the same tree. (c) Note, likewise, the development of the flower and leaf buds of the elm. Notice difference in shapes between the leaf and flower buds. This tree differs from the two previously studied in having but one kind of flower—a perfect one.
- 16. (a) Gout. (By comparison with the sheep, if this has been previously studied.) (b) Simple process of butter and cheese making.

Third Term. Spring.

(a) Continue the study of the willow, soft maple, and etm until end of term or until the seeds have ripened. (b) Sow melon, lemon, orange, and grape seeds. Watch growth and changes. (Continued from autumn.) (c) Grapes--buds, blos soms, and green fruits (Continued from autumn.) (d) Blue bird whose arrival has previously been noted. (e) Brown Thrush--one of our sweetest summer songsters. (f) Violet (g) Dandelion. [The order in which these plants and birds

shall be taken up for study will be determined largely by the time of their arrival.]

READING.

First Term. Fall.

(a) Story of The Straw, the Coal of Fire, and the Bean, in Classic Stories for the Little Ones. (b) The Child and the Apple, Elaine E. Gaston. The Peasant and the Apple Tree, Esop. (c) Nature Stories for Young Readers, Part II, pp. 69-71, 78-81, 108-110, 153-156. Cat Tails and Other Tales 35-41, 88-93 (d) Nature Studies II, 35-38.

- 5 The Lamp. Æsop; (Robinson makes a lamp.)
- 6 The Hare and the Tortoise. The Tortoise and the bagie, Esop
- The Vine and the Goat. The Fox and the Grapes. The Hart and the Vine. "Esop. Classic Stories, chapters I-VI.

Second Term. Winter.

Classic Stories, VII-X.

- The Crow and the Pitcher, The Crow and the Sheep.

 Bsop The Crow's Children, Alice Cary. The Pigeon and the Owl. Emilie Poulsson The Bird With No Name, Classic Stories Owl, Nature Stories II
- to Snowflakes, Nature Stories I. The Vapor Family, What the Fire Sprites Did, How Dame Nature Got Her Frost Who Broke the China Pitcher, A Vapor Story, from Cat Tails and Other Tales. Jack Frost, Poem.
- 11. Grandma Karline, Cat Tail and Other Tales. How the Indians learned to Make Clay Dishes, Nature Myths.
- 12. Pussy Willow, Sugar Making, from Nature Stories I. Pussy Willow's Hood. Cat Tails and Other Tales—Young March Wind, M. F. Butts. Pussy Willow, Mary E. Plummer in Kindergarten Magazine—O. Yon Pussy Willow, Poem. Taking in their Sleep, Edith M. Thomas in St. Nicholas.
- 16 Little One Eye. The Wolf and the Goat, from Scudder's Fables and Folk Lore.

Third Term. Spring.

(a) Maple Seeds, Nature Stories I. (b) The Little Brown Sled, Cat Tails and Other Tales. The Wind and the Sun, Æsop. A Cloud Story. Nature Myths. Phaeton, Nature Myths. Spring Rain, Nature Stories I. Poems—Rain and the Flowers: Who Likes the Rain, Clara Doty Bates; How Queer. Robert Louis Stevenson. (d and e) Mr. and Mrs. Robin, Cat Tails and Other Tales. Spring News, Nature Stories I. The Cat and the Birds, The Lark and Her Young Ones. from Æsop. (f) Violet, (g) Dandelion, from Nature Stories I. Poems—Bright Little Dandelion; Dandelion, dandelion, where's your cap of gold? The Proud Apple Branch, The Pea Blossom, The Ugly Duckling, from Classic Stories. Grimm's Fairy Tales: Wiltse.

NUMBER WORK.

(a) Based on nature study and the story of Robinson Crusoe; the story brings into use the tables of long measure, liquid and dry measures, and the time table. The children measure off on the school yard the distance from the door of Robinson's cave to his fence in front, the distance apart of the ends of his fence, which was in the form of a semicircle the length and breadth of his cabin. In cutting out his clothes the different pieces are measured. His baskets held different amounts; his jars also. He measures his milk, his wheat, and rice; he gathers lemons, oranges, and cocoanuts by the dozen The number of goats in his different pastures are made the basis of study. In nature study the number of beans and of peas in a pod, the number of rows of corn on a cob, the number of ears of corn on a stalk, of stalks in a hill, the distance apart of the hills, etc., furnish material for the number work, and at the same time help to a clearer idea of the object studied. The number of plums in a quart; of medium sized apples in a peck. The distance around a large apple or plum, through it, also. The num ber of grapes in a bunch, counted Size of grapes. Number of seeds in a grape. Length of full grown pussies. Length of sprays of seed. Size of watermelon and muskmelon.

Number of melons on some vines. Number of petals in a flower Number of points on a crystal, etc. (b) Written language of operations performed. (c) Tables of compound numbers used, written in order. (d) Forty five facts in addition memorized.

WRITTEN LANGUAGE

(a) Stories from Robinson Crusoe and Nature Study given by the children as in first year. (b) In addition to the points emphasized in first grade, the children learn to pangraph. (c) Copying of poems learned by them, as in first grade. (d) Writing of short letters in good form.

WRITING

Writen Language, and such others as will be used through the year (b) Familiar words beginning with capital letters (c) Exercises for free movement as before (d) Writing of stanzas of poems which the children have learned, using the capital letters with which they are working.

SPELLING.

Words needed for the Written Language, spelled bloomtreally and written. (b) Sentences dictated by the teacher containing these words.

A full bibliography of the Herbartian literature, both informan and in English, will be found at the end of Rein at I Van Liew's "Outlines of Pedagogics," sold by C W Bardeen Syracuse N. Y. This full list of authorities and books is given also in DeGarmo's "Herbart and the Herbartans," published by Charles Scribner's Sons, New York.

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By CHARLES MCMURRY, Normal, Ill.

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FIRST SUPPLEMENT

TO THE

YEAR BOOK

OF THE

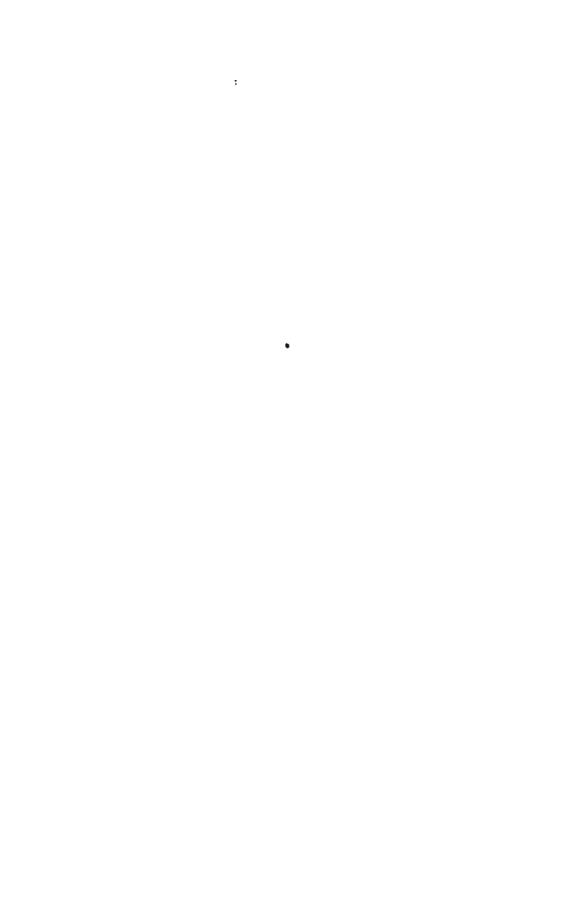
NATIONAL HERBART SOCIETY.

EDITED BY

CHAS. A. McMURRY, Secretary,

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PREFACE.

The first Supplement to the Herbart Year Book of 1895, contains the discussions of its papers at the Denver meeting. Those discussions were largely attended and fully enjoyed by the teachers present.

By publishing the papers in full and by giving time for their careful study before the meetings, it is expected that such discussions will be very pointed and closely critical, leading to an exhaustive and penetrating treatment of the most important topics.

A round-table meeting of the Herbart Society will discuss the subject of *Interest* at the national meeting of the Department of Superintendence, to be held at Jacksonville, Florida, in February, 1896. The second Supplement will probably contain this paper and discussion.

It is expected that the next Supplement, with additional discussions and notices for the following year, will be issued and sent out to members in March. Price of this supplement, 50 cents. To members it is sent free.

CHARLES A. McMurry, Secretary,
Normal, Ill.

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DISCUSSION

AT THE OPEN SESSION OF THE HERBART CLUB, DEN-VER, COLORADO, JULY 10, 1895.

REMARKS ON PRESIDENT DE GARMO'S PAPER, "MOST PRESS-ING PROBLEMS CONCERNING THE ELEMENT-ARY COURSE OF STUDY."

GEO. P. BROWN, Bloomington, Ill.:

I do not know just what I ought to say in the opening of this discussion. Probably the best thing to do is to say what I think to be true, whether it shall accord with Herbartian doctrine or not. There is a Christian civilization and we all believe that it is our business to prepare children for such a civilization. To me, Herbartian pedagogy simply means this: it means a method of realizing the values of those studies which a Christian civilization has determined must go into the schools as a preparation for life in that civilization. I do not understand it to be a system of metaphysics at all, but a method. How are we to fealize the aim which a Christian civilization has set up for erryone? How are we to realize that in the schools so far as possible? That is the question. Herbartian metaphysics I can find no use for; Herbartian psychology seems to The to have little of inspiration in it.

Now there are two ideas in this Herbartian method which has been so well defined for you: one of them is named appearention and the other interest. I think that if there is anything in the world that the school teachers need, it is a thorough study of appearention. The Herbartians have introduced that word. I think we may say that Herbart's use is peculiar. We have been using, in the same sense, certain other words. We have been familiar with the word

assimilation; we have dealt with such terms as understanding and comprehension; but, until quite recently, we never pursued the study of that process that Herbart calls apperception in any thorough and complete way. There is one man who has done much in his psychology to throw light on it, Mr. John Dewey. Apperception, in so far as it means the discovery of a series of causal relations, is a great thing in education; in so far as it means the accidental association of things not in causal relation, it is of no great value. That meaning which is characteristic of Herbart's thought is something we need and must have, and the more our teachers can study it, the better they will be able to criticise courses of study. And here let me say that this whole matter of course of study has direct application to apperception. What is the process by which the child shall grow into that sort of character which prepares for the civilization into which he is born? What are the means and materials? We are on the threshold, only, of this inquiry. The most modest of men are the Herbartian people. I am sure they do not deserve any such epithet as was applied to them in this forenoon's general meeting of the National Association. I think that all of us have got to approach this matter in the judicial spirit, in the spirit of hospitality to new ideas. The great trouble is that we are not sufficiently hospitable to such ideas. We are too much of the opinion that we "are the people and wisdom will die with" us. I think it was Job who said something of this kind. I think there is that kind of disposition in us when we have fixed a certain concatenation of ideas. We are not friendly to new ideas when we have a theory of life already formulated.

I am one of the conservatives. I have been trying to accomplish in my way what the Herbartians are trying to accomplish in another. We all desire to promote the right kind of moral, intellectual, and aesthetic culture. This has always been before those who have been thinking while they have been teaching. The demand for reform sometimes irritates those who have been living in the past, but it is wrong for those who have come up through all the years to refuse to be hospitable to new ideas or to the new rela-

tions in which these ideas may be placed, or to seem to battle against reform.

This seems to me one of the most promising of movements; I do not know of any other so promising, but let me say that when the Herbart Club pins its faith to Herbart's metaphysics or to any other doctrine which refuses to accept the truth when the truth shall be revealed, we shall all lose our sympathy for it. This question is not a question that can be decided by what appears on the surface; it is a great psychological question. A valuable contribution to it has been made by Dr. Hinsdale in the paper on mental congruence. I am reluctant to make any criticisms upon the views in that paper, but I doubt whether some of the statements are fully justified. I think that all truth is congroous and that there is nothing that is incongruous with truth except a lie. I believe there is distinct discipline in historical study, in language study, and so on throughout the curriculum. I believe thoroughly in that, and assume that the Herbartian people believe in it. We must have the disclone that comes from the study of mathematics, of histury, and of literature, if we are going to have properly balanced character, but I wish to say again that the truths which we find in all these departments can not be classed as acongruous.

C B GILBERT, St. Paul, Minn.:

When the Herbartians pin their faith to any doctrine, this organization will cease to be the institution that it is now and then it must be succeeded by some other club seeing the truth. One great good thing has already been accomplished by the Herbart Club and by other such movements, even if all the truth that the Herbartians have brought forward has been known to the wise men for centuries, as the wise men say, these young men have set the feachers to thinking. The wise men have kept it all to themselves and the rest of us never knew that they had it. The test of us have already got great light from what these young men have done.

It seems to me that the paper by Dr. DeGarmo is the best view of the whole matter I have seen, best because it is not radical, recognizes the good in others. After the discussion at Cleveland last winter, I think DeGarmo has shown a great deal of true Herbartian, Christian kindness.

If education aims to make of the child the best possible citizen, it is no simple thing. In the good old days when society demanded nothing except the few arts of reading. writing, and arithmetic, in those days anybody could keep school. The questions, suggested by such a paper as we are considering, make modest people and honest people stop and think. All training of children should be moral in its purpose. I wish to suggest one or two of these problems and not attempt to solve them. How are you to make a strong, upright, useful life by instruction? The way has not, to my knowledge, yet been discovered. Certain things can be done, certain things cannot be done. If anything is to be done, it must be accomplished by leading a child to live during childhood the same sort of a life he is to live when older. Many people who have never heard of ethics have been the representatives of the best of morality. Morality is a broader and more difficult thing than ethics. Instruction, so far as it is instruction, must be ethical rather than moral. Now, if a child can be trained into power, we have solved a problem. How is the will to come in? The only preparation for living is by living. You cannot fit him by talking about living. The only preparation for the future is the present. How are you to make the next generation better?

There is one point upon this subject, however, of which I wish to speak. President DeGarmo treats rather slightingly the relation of form and content. Perhaps lack of time may account for the omission. I gather from the report that he does not place much stress upon it. The most vital thought with the Herbartians is the relation of form and content. The failures of thousands of people, most failures in fact, are due to the exaggeration of form over content. I have no patience with the study of art for art's sake. Why not wealth for wealth's sake? It is the same condition, the giving of the best energy to what is of sec-

ondary importance. It is recognizing means as ends. Now, if we would lead the child to the best ends, let us see that he does not worship money, or power, or art. We must put such training into the schools that he must there either by direct or by indirect instruction, receive into his soul the growth that is due not to the form of study but to what there is in it of valuable content.

R. H. BEGGS, Denver, Colo,:

The first paragraph of the admirable summary with which the paper before us closes, reads as follows: The highest function of the studies is an ethical revelation of the elements of civilization to the child. I should qualify this proposition by substituting for the first three words "one of the highest functions."

The old pedagogy has failed to recognize the importance of this function, and, as a disciple of the old school, I wish to express my profound gratitude to the Herbartians for the service rendered to the cause of education in emphasizing the importance of ethical culture; and should they succeed in making this stone which the builders have so long rejected, the head of the corner, the educational edifice will surely gain, rather than lose, in symmetry and strength. But the choice is not necessarily between rejecting it and making it the corner stone. We need not deny the vital necessity of ethical culture because we decline to make all other culture subordinate. It can neither be omitted nor wholly subordinated, without irreparable loss. It is absolutely essential to character-building, which all agree is the ultimate alm of education; but other things also, are essential. Other things being equal, strength of character will vary directly as the vividness of one's moral perceptions and the intensity of the feelings and desires thereby awakened. But we need more than the ability to decide what is best—we need the Nower to choose what our judgment approves. "If to do were as easy as to know what were good to do, chapels had been churches, and poor men's cottages, prince's palaces. ' ' I can easier teach twenty what were good to be done, than be one of the twenty to follow mine own teaching."

The unerring perception of moral worth and beauty that gave us the picture of "A Cotter's Saturday Night," could not give us the reality. We need not merely a development of the moral sense, but power to act in accordance with our moral judgments. And this power can be developed by cultivating the power of self-control in general. He who can at all times follow that course which his judgment tells him is for his highest interest, will be able to choose rightly between judgment and inclination in the sphere of moral activity.

"That nature, which, through fire and flood, To place or gain finds out its way, Hath power to seek its highest good, And duty's holiest call obey."

As we look about us we find more people who can not act as their judgment dictates, than there are who suffer from errors in judgment itself. Give all men the power to do at all times that which their judgment approves, rather than that to which inclination points, and the saloon, the gambling house, and the brothel would cease to be serious factors in the problem of municipal government. When one follows inclination rather than judgment, he chooses the less desirable, but nearer, rather than the more desirable, but remote. The laborer who starts home on Saturday night with his week's earnings in his pocket, knows that to spend his money on his home and family will yield him the most enjoyment, but the saloon offers immediate gratification, and he enters knowing that tomorrow, with empty purse and aching head he will curse his own folly. What he needs is the ability to eliminate distance in choosing between objects of desire. His is the characteristic weakness of the child and the savage, and to each alike this power must be imparted before a strong character can be evolved. And in this as in all other directions strength must be developed by exercise. Herbart recognizes this fact in his chapter on "Government" in "Science of Education," and points out the enervating effects of close supervision, telling us that "the need of it grows with its use." He seems to perceive clearly that in governing children the

controlling power should be removed further and further away that the power of self-government may be developed. But self-government is but another name for acting in accordance with one's judgment instead of yielding to impulse, and this again is only giving each object of desire its due consideration, regardless of its distance in time or space.

In the selection of the subject matter of instruction, and in determining the method of presentation, we must not lose sight of the vital importance of developing the power to follow, as well as to form, beautiful ideals. Two boys begin life with identical endowments. The one, on a western ranch, acquires skill with the axe and spade in the dull routine of daily labor. He becomes an expert horseman in caring for the herds upon the unfenced range, and inated to exposure in guarding them day and night through summer storms and winter blizzards. His reward is never immediate, he endures present privation for future reward. The other, brought up to the life of a hunter, acquires the same skill in the use of axe and spade, the same horsemanship, the same ability to endure hardships and exposure, but they are acquired in the chase and for present pleasure or immediate gratification. At thirty let these men change places, and the ranchman will soon become a thrifty hunter. the hunter an indolent, improvident, shiftless ranchman.

SARAH C. BROOKS, St. Paul, Minn.:

The moral subject seems to be the one uppermost in our thoughts today. In the seventh of the propositions deduced from Dr. Decarmo's exposition you will find the first thing I want to discuss. "The sequence demanded by the culture 'Pochs must be kept in subjection to the child's environment." There are two parts of this environment, the physical and the spiritual. These parts are represented in the schools by nature study on the one side and by literature on the other. I have given a good deal of time and thought to these two subjects. I have never yet seen why there should be any conflict. They are both environment, one also the physical side, the other on the spiritual. One kives activity and the other appeals to the feeling, and to

my mind, these two studies should stand side by side in the curriculum with the little child in the midst. It has been said that feeling lies above and below the will, on the one side blind and ignorant, on the other active and intelligent. However that may be, there can be no doubt that feeling largely adds to the force of activity on the part of the child.

We are letting these old ideas of the importance of the formal studies go away from us so fast that we are ceasing to hold the child responsible. So, when we come to consider the thought studies and the formal studies, we should remember that the formal studies, though secondary, open the gate and answer the questions which come at the gate way. If they succeed in establishing their worth and importance in the work of instruction, they have a right to an independent existence and to development according to their own inward law. Language, reading, painting, drawing, and the expression studies have no more beautiful reason for their existence than to afford means of expression for the great thoughts of great minds. It seems to me that their place and importance should be well defined and that we should not let them go on in this indefinite way. We must give to each study a right to branch off and to assume its own characteristics.

Mr. Gilbert said that, before this stirring up in our midst by the Herbart Club, the wise men had wisdom but kept it to themselves. There is still danger of a failure to make pedagogical principles well understood. Mr. De-Garmo uses some language in the paper which we discuss which I do not understand. He says that mathematics is the formal quantitive study of inorganic nature. How is that to help us? I think that we must simplify our statements if we are to have the help of the teachers in the solution of these great problems regarding the curriculum.

There is another point that seems to me of great importance which has not been settled. I have been delighted to see how simply geography is arranged, but it is not so in nature study. Dr. Harris says he has not found in any of the courses of study he has examined that literature and nature study have been balanced. What is nature study

for? To strengthen the intellect? It seems to me not. Nature study should be pursued to put the child into sympathy with nature. It should be to his heart what the winter is to the apple, a mellowing, softening influence. I believe we would make more rapid progress if we were to agree upon this great principle, why the child should study nature. We have had that presented to us in many lights. Do you not see that these other things are minor? These come about incidentally, but the great thought is, that the study of nature must be for the sake of putting the child into the proper relations with the things by which he is daily surrounded.

O. T. BRIGHT, Chicago, Ill.:

I am sorry to say that I have not been able to come to this meeting only within a very few minutes. I do not feel in the spirit that I hoped to feel in while taking a very few minutes in the discussion.

This thought has been put forward two or three times today—a fear that the children are not going to do something thoroughly and well because they do something that interests them. I have not much sympathy with the theory that people are expressing in that direction. Children do the best the thing that they are most interested in, and it seems to me that teachers cannot do better than to select things that appeal most to the child. It is the search for the thing which will interest the child at his time of life that has made us consider the observation of children and nature study, and it is that which makes us consider the bringing of something to the child which he can read at the time. I think the thing was stated this morning in all its baldness, when one of our Western friends expressed the fear that thought studies would be crowded on the child before he had time to get the formal studies, to make a living with, I suppose. The inference is that we shall give the children reading, writing, spelling, and arithmetic, because they will need them when they are old. "We should not give the thought studies, something to think about." (?) The man was honest! The teaching of reading has been, and will be so long as that sentiment prevails, a barren learning of forms. Why do the children learn to read so slowly? Because there is nothing to read. If the child begins at the age of six to want to read because he is to get something out of the sentence, the problem is nine-tenths solved at once. We would not have this hard grind of formalism. We must give reading to the hundreds of children, because they are going out as if every one was going to be a New York banker! I would give them something to think about. You need not be alarmed about the thinking child, he will be a thinking man. As I came across from Chicago to Denver, I saw the few scattered hamlets and here and there a school house, and the thought came to me. What would be the best possible thing that somebody could do for these people? Would it not have been best to teach them to love to read? I hold that intelligent teachers should teach children to love good reading during the first three years. They should love to search for the beauties that are bound up in these characters. That may be done during the first three years. I believe that the pressing duty is first to train teachers to a love of literature in English, I do not say English literature. Then, of course, the teachers will carry the wealth to the children. The trouble is that the teachers are not in sympathy. One of the troubles is that the normal schools have paid little or no attention to this matter. I have, within the last year, seen a class in the third grade reading and selecting from two beautiful books prepared for children, one Whittier's Child Lafe, the other, Elliott's Poetry for Children. Not a routine lesson in reading, the form had all dropped into the background. Talk to me about devoting three years to form!

C. C. VAN LIEW, Normal, Ill.:

I wish to say a few words in reply to what seemed to be implied in the remarks of Mr. Beggs. We will all agree that the most forcible means of fixing a child in moral habits is by moral acts. But that is not the only means. Are we ready to lay down the Bible? Are we ready, then, if that is the case, to withdraw our legislation against obscene litera-

ture? To deny the power of instruction in the development of the will power is to deny the power of the idea entirely maction. As soon as we do that we take away the content of thought.

I wish to bring the discussion a little more to some of the points in this book by asking a question of the author of the paper. In the principal paragraph on page 24, the author endeavors to show that geography most universally unfies the curriculum. Is it not a fact that this unifying power of geography lies largely in the fact that it contains the element of sociology? Is it not due to the humanistic element? If that is the case, is not the great central thought the humanistic movement?

PRESIDENT DEGARMO:

Wait until tomorrow.

Strpt. PARR. St. Cloud, Minn.:

There are a few things that I would like to remind the members of the society. There is an implication that there was, in this country, no philosophy of education until this German plant was brought across the sea.

There are some things that we would like our Herbartian friends to settle. Is the school to be life or a transcript of life? Does the pupil go there to live, or to master those things that make a transcript of life? This is a question which no system of education can afford to ignore.

Something has been said to the effect that we must not act the control of the con

Now a word as to the weaknesses of this movement, one wo of which were pointed out at Cleveland It ignores will and makes it a form of interest. It regards the das made up of knowing and feeling. I have been hearfrom those who are in this movement about doing away he the old psychology. Now is it not true that there has no faculty psychology in existence for two hundred Herbart wiped off the slate one set of faculties, and bed down by chairman as off the subject.)

PRESIDENT DEGARMO:

I cannot undertake to stand for any man's ideas as to the difference between the ethical and the moral. I think most of us understand by morality the relationship of man to his Maker. The term ethical is used in this paper as by the Herbartians of the relationship of the individual with his fellows, not as fellow savages, but as those who are in a very complex organization. I understand Dr. Harris to say that there is a great civilization, and that we must be adapted to its business life, its church life, and so forth.

Just one word about the point at Cleveland. Our friend must not assume that we assume to know very much of everything or of anything. How to do some valuable thinking, to investigate this whole school-room question, is what we have set before us as our work.

We are not Chinese. We do not worship our ancestors, but we have a very healthy respect for them.

Now about this matter of the will, we refuse to be crowded into that corner. Dr. Harris discovered that Herbart was advocating a good thing but for a bad reason. There are sufficiently good reasons for interesting the children and we say to Dr. Harris that we propose to try to interest the child in these subjects because they are of use to him.

L. E. WOLFE, Jefferson City, Mo.:

For centuries we have learned that religion expresses man's relation to his Maker and morality his relation to his fellow man. Now we are told that morality expresses his relationship to God and ethics to man. Shall we reconstruct our definitions?

SUPERINTENDENT GILBERT:

Ethics has to do with the philosophy of conduct, morals is conduct itself: one is philosophical, the other practical.

The essay on "Culture Epochs," by Dr. C. C. Van Liew, of Normal, Illinois, was next taken up, and the absence of President Cook explained. The opening of this discussion could not, therefore, take place according to the program previously published. Colonel F. W. Parker, Chicago, Illinois, was called on to continue the discussion.

COLONEL PARKER:

I am not prepared to discuss the very valuable essay of Dr. Van Liew's, on Culture Epochs. I have read the paper, but have not studied it sufficiently. I trust that this essay will receive such a thorough and careful discussion in the future as it deserves.

No subject was ever brought into the American schools that furnishes so much food for thought and such abundant means for discussion as the subject we call "Herbartanism." The distinguished teachers who have spent several years at Jena studying, under the famous Dr. Rein, are, to say the least, full of the subject, full of the doctrine of correlation and concentration. Herbartianism, as I understand it, means earnest and unlimited study of the great subject of education and honest, earnest, fair discussion. The Herbartian doctrine is a working hypothesis to be examined, accepted in part or whole, or to be wholly rejected.

Very much of discussion in the past has been in the air.

Pracussions have been either vague theories or everlasting denials of any suggestions of progress. The day of pure singmatism is fast passing away; discipleship, too, has not that hold upon the teachers that it once had. We can point to no one doctrine, or to no one man in the past, that has presented us the whole of truth. We look upon past systems or doctrines as movements toward something higher; nothing is finished nor ever will be finished.

The fundamental good we get out of the past is direction. We no doubt get great fundamental principles or direction for action. The final test of a principle or direction is its infinity in application. A method that does not open out a vista of infinity in application is wrong. We can no longer say that this method is right and that is wrong. There is only one method, and that is the economical presentation of conditions for the action of the laws of human growth. There is only one method worth applying, and that is the method of the teacher who studies and understands great fundamental principles and continually applies them; in that application there is everlasting movement toward something higher and better.

We are all ardent admirers of the great Pestalozzi, but it is doubtful whether we would admit him as a teacher in any one of our schools. He was not a psychologist, he was not a philosopher, but he was, indeed, a great lover of humanity. What he formulated was a necessity for his time; what we get from Pestalozzi is his loving, earnest, truthful spirit in its endeavor to find something better for the children, and that, indeed, is what we get from every great teacher of the past.

Dr. Brown has seen fit to condemn Herbart's metaphysics; whose metaphysics of the past shall we not condemn? I never understood that Herbart made any claim to metaphysics. He was a psychologist, he was what the Germans call a Bahnbrecher. He tried to discover a psychology that could be applied in school-room work. He was the founder of rational psychology. Out of Herbartianism has grown the great movement of physiological psychology which is now culminating in child study.

No doubt we can get much from the great philosopher, Hegel. His restatement of the great fundamental principles of Christ so sublimely presented in the "Sermon on the Mount," that self-activity is the fundamental law of growth," is worthy of the attention of every teacher. Herbartianism reaches its object, suggests what shall be done with the child. It may be that I am mistaken, but I have searched diligently to find Hegel applied in the schoolroom. If there is any spot in this country where the Hegelian doctrine has struck the ground, or entered into the life of the children, I wish to be led to that sacred spot that I may worship. No doubt the Hebartian doctrine is full of mistakes and errors; but it proposes to reach the child's mind, proposes to study the nature of that mind,

proposes to suggest the best possible methods for mind growth. There are countless theories in vogue, which, as the Germans say, "Schweben in der Luft." They are discussed and rediscussed, over and over again, books are written exposing the theories; but the poor children go on the same weary round of dead-form work. The real test and the true test of a theory is in its practice, in what it gives the child, what it leads the child to do.

We are not here, then, to accept the Herbartian doctrine as the great students of this doctrine present it to us; we are to study it, we are to examine it. As I have already said, it is, no doubt, the best working hypothesis ever presented for the study of teachers.

However, in the study of a doctrine of education, we must also study the history of the people, the nation, out of which the doctrine grew. A reformer can, indeed, get beyond his own age, can get beyond the influence of government and society that presses upon him, and still no doctrine can be studied unless we understand the inner history of the people of which the theory is the outgrowth.

Our triends, the students of Herbart, emphasize the teaching of history and literature as a core, the center, of educational movement. We all agree that there is very much in history and literature. We can also thoroughly understand another very important fact, -that history and literature are a prominent means of adjusting the child to the society, to the state, to the government. Through history and literature a child can be made to believe in his own government and the society in which he is born. If classes exist, through history and literature, he can be made to feel that these classes are the will of God; if there are kings and nobles, he can be made to feel that these kings and nobles are God's anointed. If he is a peasant, he can be made to believe that it is God's will, and can remain all his life a peasant. History and literature, I repeat, are a powerful means of adjusting the child to the exact state of society in which he finds himself. I do not mean to say that history and literature should be used to this end, but I mean to assert that it has been used in Germany to make each German child believe that the Fatherland is the only land, that standing armies are a necessity, that the emperor is God's anointed, and that the establishment of classes is in the line of the highest progressive movement.

Let me illustrate this: I wish to assert here before these students of Herbart what I believe to be a fact-and without understanding this fact and its influence, very little of Herbart can be understood-it is this, that nature study, the study of elementary science in elementary schools, was kept out of the German schools for many years, for fear that the study of nature would lead children to search for the truth themselves, and by that search would be able to understand the nature of the present state of society and government; that they would doubt the infallibility and indestructibility of thrones—in other words, that the rational or reasoning spirit would enter children's minds through the study of nature; and with the French Revolution behind them, the German leaders saw nothing but danger lying in the path of nature study. The instinct of oppression is an acute and sharp one, it scents danger as the hound scents his game, and that danger lay for them in adjusting the child's mind to eternal truth, to God himself. The moment that adjustment takes place, the mind breaks away from the present forms, breaks away from conformity to oppressive government, seeks something higher.

We have the question of the relative place of nature study and the study of history and literature. In the first place, I do not claim,—Mr. Jackman, who is to discuss this question, does not claim,—that nature is the center. I wish to have these words written in Italics, we do not claim that nature is the center, neither do we claim that history and literature are the center, we do claim that the child is the center, that this being, this highest creation of God, with its laws of body, mind, and soul, determines in itself, the very nature and condition of its growth. It is not a question, then, with us, who in a loving, true spirit would criticise our friends, the Herbartians, of any subject being the center, but to simply bring to the front this Cinderella of education—nature study. It is to co-ordinate, to give nature

study some place, in the curriculum, to make it one of the great means of human development. It may, or may not, equal history and literature, but it is of first importance. Please to understand our position, when I say again, that we do not claim nature as the central study. The study of nature has been the spectre, the horrible spectre, of those who would hold the human mind in subjection both in church and state. You all know with what tremendous opposition the doctrines of Darwin met; you all know how church and state, with their efficient instrument the pedant, have striven against the onward march of progress, have fought against the search for God's truth in his manifestation of Himself through the universe. We ask for some place, and indeed a great place, for this manifestation of the Eternal One through all His works, and the reason we give for the neglect of science studies in the school, throughout the ages of education, is the awful danger of human progress that confronted those with fixed beliefs and sordd aterests.

There is a great study of man, we should call it ethnolog), and the study of man is in truth one of the nature stones. History is a report of ethnology, or the development of man from the beginning, a report filled with untroths, a report written by fawners at the foot of thrones, and the obsequious admirers of great generals. The study of Instory requires the closest investigation. It is, indeed, an all important study; but ethnology is the central study, let it be understood, and history is the record of ethnology. No one can have a liberal education, or even a movement loward education, without the study of history and literathre It has been a great headlight upon ethnological movements since the beginning. But to say that we make history the center, make the special pleading on the part of dogmatists and vassals the center of a whole system of education, is, to my mind, incorrect-to disdain the direct revelation of God and take up that zigzag, imperfect movement of man.

The great difference between Froebel and Herbart may be found in the difference of appreciation of children and

child life. Herbart's greatest mistake was his lack of recognition of the instincts and spontaneous activities of the child. To fail to understand the child is a fundamental failure. To fail to appreciate the action of the child's mind up to the school age, is a great mistake. The child is not born selfish. He is born the bursting bud of the love of God. He should be developed into the full flower and fruit of God's love.

GEO. P. BROWN:

I think the Colonel is not heeding his own exhortation to treat the positions of others fairly. Metaphysics is a man's theory of those things that must be presupposed in experience; so I take it that each man will have a theory of his own if he does not follow some one else's theory. What I want to say is that so far as I understand Herbart's metaphysics, I do not see that they form a basis for my experience. I want to say another word about psychology. One's metaphysics forms a basis for his psychology. Herbart certainly applies the rules of mathematics to psychology as completely as I ever saw it done. That especial phase does not seem to be very profitable, but when it comes to the elaboration of apperception and interest it is one of the greatest things ever done for pedagogy.

W. P. Burris, Bluffton, Ind .:

Some one has said that concerning all new truth it will first be said that it is impossible; second, that it is not new, and third, that we always believed it. I think that the attitude toward Herbartian pedagogy is number two, and that the time is not far distant when it will be number three.

I was somewhat amused when I sat at luncheon to-day to hear that the Herbartians are taking particular pains to convert people to their belief. Why should not we try to convert people to our opinions? If we have no message for the teachers, then let this and all other meetings of the National Educational Associations adjourn and go to Pike's Peak, or into the cave of the winds, or some of the Col-

orado bottomless pits. I do not know where this gentleman was born whose conversation I heard. He probably thinks it will never be necessary to be born again.

I think Herbartian pedagogy is to be the angel to roll away the stone from the sepulchre of formalism in which the schools of America have been entombed. For the first time I get some light on the question of making a curriculum for schools, some light on the question of values. The Herbartian pedagogy certainly does bring us a great step in advance, and with apperception and interest as guides outlines the way for the future.

Now, concerning the paper of Dr. Van Liew. I am unable to add to what he has said on the question of culture epochs. He has undoubtedly made a substantial contribution to this subject, and also given us a great deal of light on the more difficult question as to how far the culture epochs shall be a determining factor.

Now, I had hoped that President Cook would have opened this discussion, and it would have been unnecessary then for me to have said anything. I must commend this paper for the fair spirit in which it approaches this subject. I hear it charged again and again that the Herbartians think that the theory of culture epochs should determine the selection of materials without reference to the institutional demands of the present. Now, Colonel Parker has given Goethe's definition of history, I want to give Emerson's. Emerson was not the first, nor yet the last to be ashamed to see what a village tale our so-called history is. The great seer saw that unless we think what men have thought, and feel what men have felt, we study history but as words. It is the lives of men that we are to read, the books are but commentaries.

Now, I think that in some such sense as that the Herbartians use the history. The child cannot understand a Gladstone at first, but there are certain types beginning with the simplest manifestation of the spirit, and we can continue through the development of the race to the highest type. I think that Dr. Van Liew might have made a little more of authority in his paper than he seems to. It

is very remarkable, to say the least, that persons in all fields of investigation have made the same discovery. Professor Edward Cairn, in his new study in the field of religion, declares that the individual comes to know himself first of all in the mirror of the world. The doctrine of culture epochs demands that we shall reflect the world.

Now, I think I ought to exhort you to read Dr. Van Liew's paper. If you have not a copy of this document, you can be provided here or elsewhere with what I consider one of the best contributions that have been made on culture epochs.

SUPERINTENDENT PARR:

I would like to ask what is meant by this oft used expression that the development of the child is an epitome of the development of the race. We understand the term race is generalized from some billions of human beings no two of whom were alike.

DR. VAN LIEW:

It is true that no two of us from the beginning have been just the same, but we have been alike or we would not have been classified together. The fact that we are all called human beings is sufficient proof that we have characteristics enough in common to warrant the term. The question is a good one in that the contributions to the school journals frequently express such doubts. We are to seek the answer first in a correspondence in the physical growth, second in the intellectual or spiritual life, in the will and the emotions, or in the line of spiritual power. It does not mean that the child repeats the specific products: he does not have to be a pirate.

Not only between the races as a whole and the child do we find this relation, but between him and any people, as the Germanic people or the English people. We get there a very similar development to what the race as a whole has gone through. I give a few instances. The first literary products are in the myth and the fairy story. The myth, as defined by John Fiske, is the explanation of natural phe-

nomena by the uncivilized mind with the introduction of personal experiences to such an extent that the phenomena themselves have been lost. Hercules, Jason, and Ulysses are examples. Now, the early peoples, not knowing the underlying laws of nature, resort to the superficial facts and see between the clouds and the ship a likeness, or the Indian hears in the trees what he cannot understand by the laws of nature and he thinks of voices like his own. Man seeks to find all things under experiences like his own. He discovers a will within himself and he seeks to find a will in nature. What child is not moved by nature with superstition? Why is it that our writers resort to imaginative forms of literature? Consider Hawthorne and Kingsley. And then again, why do our authors so frequently assume the form and even imitate the style of the ancient myth?

The first conception that the race has of deity is anthropomorphic. This conception gives to the deity all the thoughts and emotions of man just as the child does. He gets his first ideas of God in the good qualities of his father and mother.

SUPERINTENDENT PARR:

There might be some question as to what the individual is in the first history of the race. You speak of such stories as Kingsley's Greek Heroes: is it not the manner of treatment that has as much to do with it—the fact that it is put in a certain way to his mind? A little story, "Skyward and Back Again," is not less interesting to children than Kingsley's Greek Heroes. It is the story of a drop of water on its journey from the sea to the sky and back again.

DR. VAN LIEW:

That is an excellent question to bring out the difference between what we would give to a child of its present environment and what of a past environment.

I think that a story of that kind put in true literary form by a true literary artist meets the requirements of culture epochs. I would like it side by side with the mythological stories. In the first place, the child has to start where the race begins, namely, with the sense impressions that come to him from the world without. He deals with the material in a raw state, then in imaginative forms, then in more definite forms.

DISCUSSION ON DR. F. M. M'MURRY'S PAPER "CONCENTRATION."

JULY 11, 1895.

Dr. McMurry presented the subject to the club by reading the thesis of his paper.

LOUIS H. GALBREATH, Winona, Minn.:

I regret to say that I have not had this paper in my hands sufficiently long to do it justice. I am intending to make one or two observations on which I am not myself clear and decided; they may come wide of the mark.

Instruction is a process of influencing the activity of a pupil, by a teacher, toward some represented end. That this preconceived end should affect the selection of studies, no one doubts. Should it not also affect the arrangement of studies? Should the principle of concentration which guides in the arrangement of studies, be applied irrespective of this end? It seems to me not; I am inclined to the belief that the articulation of subjects, as well as their selection, contributes greatly to the realization of this aim. If the chief end of education were the development of knowledge. we might expect to see the studies so arranged as to result in the greatest clearness and closeness of ideas; if it were the development of moral knowledge, then we might expect a more special care in the selection and arrangement of studies for such an end; and for the same reasons, if the aim is to touch character and affect conduct, in order that it become more ethical and productive, we should look for an employment of the pupil's time and energies in a way most likely to realize that end. The psychology of character-building, not merely the psychology of the learning mind, should guide us in constructing a curriculum. The natural thought relations are not the only ones to be borne in mind in adjusting the studies in a course and program; the association of ideas to activities of the will demands attention. Instruction with the highest purpose must aim at the cultivation of right and efficient willing; some studies must be depended on to give quality to the will, and others to give efficiency. In a curriculum or program the two classes should be so adjusted as to produce the trained will.

On page 68, the author states that he wishes to keep character in view as "the prime object of instruction." But, as it seems to me at present, he does not have in mind all that this involves. Character-building carries with it (a) a recognition and a position for science studies and manual training which he does not seem to hold, and (b) a demand for certain form and spirit of exercises for which he does not adequately plan. Each of these points gives rise to the question whether the principle of concentration as a guide in the arrangement of subjects is not too narrow. Should its basis not include more than the association of ideas? Are the relationships with which concentration is concerned to be nothing but those which are to become apperceptional relationships to the child? (Page 51.)

In the development of his thesis, the author, demanding some "central study" (p. 61), selects history, and places science second and contributory; this is done on the assumption that history and its near relative, literature, are the best means of influencing the moral life of the child. As I see this point now, I must enter an exception. Moral conduct has, at least, four essential mainsprings which education should supply: (a) a knowledge of what right action is; (b) an insight into the means and conditions of its realization; (c) the prompting of a sufficient motive; and (d) a consciousness of his personal ability to perform the right and needful act. Now, history and literature, in my judg-

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ment, cannot meet these needs, nor can subordinated science and manual training, that find their chief value in aiding to understand the central study, supply the deficiency. History, science, and manual training, must co-operate in equal ranks, serving coordinate and essential ends of right instruction, to meet the demands. Perhaps the conception that there is a one chief end of education, because of which there is a demand for a "central study," is a source of much erroneous thinking: whereas, in fact, the apparently one moral end is complex and manifold, requiring many subjects to realize all the necessities of insight and action. Broadly analyzed, character and conduct represent the two attributes of quality and strength; now it is thinkable that one group of subjects might give tendency or direction, while another adds the strength or efficiency. So I can accept the statement (p. 61) that "the ultimate aim of the school is the development of good character," and that "the child should be influenced by instruction to view the whole world from an ethical standpoint;" but not that history and literature should be given places of such continued prominence to the equally continued subordination of the other studies. May not a boy learn the economic relations of mankind how service is exchanged for service-and come to himself ethically through a study of geography? Will not insight into scientific principles and a knowledge of their application to the arts and industries in his environment affect his "ethical standpoint?" Will not the skill and conscious power acquired through manual training tend to augment the number of high and firm resolutions? Education should aim at productive moral motives.

The studies that should occupy places in the curriculum are those that can enter into close apperceptional relationship, in the mind of the child, (p. 46) with the "central subject." Does this not theoretically as well as practically shut out much that should enter? It seems to me that a thorough application of this might fail far short of real moral will-training, and end with the mere development of moral knowledge and moral sentiment. It seems to me that a program must plan to lead the self-activity of the pupil

to participate in the moral world that is revealed to him through instruction; it must plan for doing, for productive activity, in which efforts of the will are correlated with the ideas of the intellect. This relationship, which appears necessary from the moral and productive standpoint, may not be identical with the appearceptional relationship, which concentration attempts to achieve, but it is no less important. Can not careful supervision, with the proper spirit pervading, make plays, form exercises, manual training, and the recognition of special days and seasons, of high value ethically, in the lower grades; and could they not be kept, as means to end, in close connection with the main thread of the thought studies?

If what I have tried to suggest is true, concentration as a guiding principle, is not broad enough. Its basis must extend beyond the apperceptional relations of ideas; it must include the relation that naturally exists between an idea and the corresponding effort that tends to realize it. Studies must be united not merely for the sake of clear and compact associations, or well massed groups of ideas (p. 30), but, in part, for the purpose of giving to the child the consciousness of how he himself can actualize the ideal. From this standpoint, we may be led to deny a permanent place to bistory as the "central subject," and may be led, also, to unite studies and exercises, at times, on a different and an apparently opposed psychologic basis from the one set forth in this most admirable paper.

MR. F. McMurry:

The first question here is, how much does the idea of concentration really include? This problem involves the aim of instruction. The aim of instruction will determine the times of study. Before we have the subject matter selected, the great problem stands before us, how can we arrange the subject matter so that the greatest effect will follow? That is the problem of concentration. The studies are already chosen, now we are trying to relate them, to so arrange our lines of work as to have close connections among them. Concentration affects character to this ex-

tent. If ideas are closely related, strength is increased. The quality is not affected. I would simply say that concentration has to do with strength of character but not with quality. Method does not come in concentration, neither does curriculum. If we had a study called living along with six or eight other studies in which to apply the moral thoughts, then the relationship of that study called living would be a matter of more concern. The only question is the fifth formal step. The form studies apply the material got in the other studies. The fifth step is application which can not be called a study.

I have involved the idea of moral training in the point where I have asserted that, the leading aim being ethical, those studies should stand in the foremost rank. To the question whether or not concentration is complete. I answer that, in the sense of the speaker it is complete. There are other laws exceedingly important. The other points, the idea of subordination and of form and content, I think we will postpone; they will be attacked later.

SUPERINTENDENT PARR:

I would like to continue the process of questioning which was begun yesterday. Why say that the problem of education is ethical, setting the ethical element to the front in the place of knowledge and will? It sets forward the emotional element, and does not recognize Plato's doctrine, that at the bottom of all good is knowledge, nor the modern doctrine, that at the bottom of good is the good will.

MR. F. MCMURRY:

Conduct involves resolving, resolving presupposes ideas. If conduct involves volition and the predetermination involves ideas, we have implied enough.

SUPERINTENDENT PARR:

Why not say it?

MR. F. McMurry:

We do not want to say all at once.

Dr. VAN LIEW:

There is a good reason for emphasizing the ethical over the others; they are not co-ordinate. The ethical must control every time or else the intellectual is dangerous. The same is true of the emotional. Men who have been emotionally developed, especially in the arts, have not been able to live right because the emotional is not under the moral.

MR. CHARLES A. MCMURRY, Normal, Ill.:

The subject of apperception was employed in the same connection. I would like to ask whether concentration or apperception either shall be limited to the intellectual. We apperceive emotions and will movements just the same as other forms of intellectual life.

Mr. F. McMurry:

I desire to call attention to the first two and a half lines of my paper. "The principle of apperception declares that what one can know and feel and will depends upon what he has already known and fell and willed."

MR. GALBREATH:

l agree fully with that view of apperception, but still, does that point out the relations that should exist between an idea and an effort, an idea and an emotion? Is there such a thing known to this psychology as an apperceptional relation between feeling and effort? It seems to me that concentration must imply that there should be a relation recognized between the content subjects and the effort of the will. That is not an apperceptional relation, is it? Every idea in consciousness gives rise to a corresponding emotion, every idea gives rise to a certain effort or tends to, is that recognized as a relation of apperception? If I awaken in a child the idea of benevolence, I need a coordinate expression of effort. (President Cook—Take up a conjection.) Yes, sir. Give the child a chance to participate.

SUPT. L. H. JONES, Cleveland, Ohio:

In this connection, I was surprised to hear the author of the paper say that there is no fifth study. I thought the application of these principles was the fifth study.

MR. F. MCMURRY:

What is the name of it?

DR. VAN LIEW:

May I ask a question in connection with Mr. Galbreath's thought? He wants to know whether there may be a co-ordination by the child's individuality put in practice in this little community which typifies the future world into which he is to enter. There are sundry school celebrations such as the twenty-second of February and Arbor day which relate to the country, and it seems to me the point is well taken.

PROF. GALBREATH:

One illustration will answer. Along at Thanksgiving time the programme is made out in which the busy work of the children is in accordance with the season. Then the question follows, How can the feeling of gratitude find a proper expression? Shall it be by words merely? What other things can you do? To whom ought you to express gratitude? You can make gifts. A similar programme can be arranged at Christmas with a different spirit.

Prof. W. S. Jackman, Chicago, Ill.:

I do not think I should criticise this paper were it not that Mr. McMurry expects me to do so. I can agree with these theses throughout, except in article eight: "Since the development of good character is the primary object of the school, literature and history are the most important subjects of study; hence, they can best form the center for concentration." Now that is stated in the form of logic, but it lacks the essence.

While I am on my feet, I am going to challenge a couple of the statements on page sixty-two. "Nature study does

not teach what actions one should love and hate." It is almighty insipid nature study that does not. "It does not even deal with human actions, but with nature in distinction from humanity." Another slip in your logic! "But history and literature not only impart a knowledge of what 15 right and wrong, but they also instill a love of the one and a hatred of the other." I would like to know if slavery was driven out of this country by an appeal to history. When we looked into history, or even into the Bible, wherever we studied human actions, there was sanction for slavery—that which the world of today considers a terrible come. The change came when we found the underlying law of human rights. The point I claim is that nature study goes directly to the moral nature of the child as does instory study. I hope we will not end by pitting these two subjects against each other. My contention is that nature study goes as directly to the point as history. Underlying all nature, we find the operation of natural law which proclaims equality.

PRESIDENT COOK:

Uncle Tom's Cabin awakened the conscience; now do I understand that this sense of the wrong of slavery was awakened by an appeal to the law of nature?

PROF. JACKMAN:

Precisely so; the natural law violated by slavery is this: Where such a relation shall be established between two people, or between two classes of people, that one shall become, thereby, enervated and the other bestial, both shall perish. Thus law is inexorable, and Uncle Tom's Cabin showed most clearly the inevitable fate of both master and slave; with all the vividness of the lightning flash, it revealed the sentence of doom pronounced by nature. (The law of nature?) I think it was.

SUPERINTENDENT PARR:

of the school, they say, is to develop the ethical man; some

of us say to develop the man, without any qualification. I do not know whether it was meant to say that the school is life. It is such when the children come to play. The view of the world the school teaches is a transcript of life. Now what do these subjects in this transcript of life furnish to the pupil? Here is a question: Are there any other relations to be made prominent? The purpose is to give a view of the world, but, in adapting these subjects to the child, it does not seem that the order should be changed. I beg of this club, is there any other principle than that of aim by which to hitch these facts together?

In a subject like history, what is given must be a transcript. The original thing cannot be before the pupil.

MR. F. M. MURRY:

It is going to take us a half an hour to say what is meant. Mr. Jackman is right in his criticism of the form of thesis eight. I did not properly lead up to my conclusions, "hence." Page sixty-one was relied on to reveal the argument. I have here asserted that literature and history are in a measure superior to science. If this was a question of co-ordination of value, there would be no dispute. When I say that one must be subordinated to another, the various ones must be related to some center.

SUPT. L. H. JONES :

From what source do you get the motive power that compels you to select one?

MR. F. McMurry:

That study which deals with human thoughts and presents human actions is the most important. We have our three forms of government and say they are co-ordinate but the laws are determined by the legislature. The thought is that in the school work some subject shall give at least a hint to the others.

PROF. WILLIAMS, Ithaca, N. Y .:

Is, possibly, the author of this paper influenced by the fact that through the ages the nations approaching civili-

ration have made literature the principal thing in their courses of study? The embodiment of human thought and feeling has been something more than nature. The lesson of nature is the destruction of one thing by another. Cooperation expresses it to me better than co-ordination. I have been for thirty years something of a Herbartian. (The chairman asked what was his question.) Yes, I will come back. Of the four or five subjects which form a center, I believe that literature with history as far as it is literature would be the best center. The question is whether Mr. McMurry is led away to the emphasis of literature because the nations coming into civilization have always emphasized that subject.

MR. W. S. SUTTON, Houston, Texas:

I would like to ask Mr. Jackman whether the chief ground for the introduction of science into the school is the ethical ground. I think so; there is nothing to work for but character. I believe Mr. McMurry did not show where his missing link is. I would help him out.

MR. CHAS. MCMURRY:

We agree on one point which we may as well fix, that the central aim in education is the ethical aim. If the child is to be built up so as to be strong morally, he must have moral ideas which control all his thought. We want convictions made strong and firm to lead him to do in all directions what moral motives suggest. History teaches morals because it shows the results of the conduct of men who have been moral or immoral. Now can nature teach these ideas? If we could show that nature does not teach morals, then Mr. Jackman would be willing to admit that history and literature should stand in the center. ("If I am convinced, I will do it," said Mr. Jackman.) These literary and historical products which we wish to employ in school give us the types. As the life and spirit of Christ stand as a motive, so these best materials stand as a model and type with which we are to bring our own character and life into consonance. I find this in the life of Washington. The great historical and literary characters are the most intense inspiration to children to strengthen their own characters. Now the other point is, does nature set up such types? In a certain sense, the best things in history are most useful; the records of weakness and wickedness are for warnings only. In literature, we have the best ideas incorporated in flesh and blood. Now I can not see where nature apart from man holds up to view types with which the child is to bring his own life in accord. Nature reveals laws and beauty and God, but does nature hold up a human being and show what he ought to be? The reason why we wish to set history and literature in the center is because we have in flesh and blood the real characters we wish to follow or avoid.

The examples and types which natural science holds up are not human types and therefore they have no moral quality. We do not wish children to conform their lives to the life and example of trees or animals. We do not wish them to become trees or animals, but men and women. Moral quality is expressed by acts of will in conduct, not by involuntary or unconscious acts. Plants and animals have no choice and no responsibility and can therefore never furnish examples of moral decision and action. This is the clear distinction between the world of physical phenomena and life and the world of human relations and moral conduct.

DR. VAN LIEW:

I think I see a flaw in Mr. Jackman's argument. When we stand before nature, there is a feeling aroused that gives rise to moral excellence. When we derive these thoughts from nature do they not originate in the human mind rather than in nature itself? For example, here is a mountain forest on fire. A man on another peak out of danger sees it as a most grand and glorious sight. Another man who has suffered great loss from such a fire, and whose family and property are even now in danger, beholds only the most appalling spectacle. The inference drawn by the two is quite opposite. A man can see the grandeur of life if he

has been taught to live, he can feel bitterness or forgivebess toward his fellow men for the past as he may have been trained.

We have no quarrel with the aim that Mr. Parr puts up to train the whole man. It seems to me that it is a mistaken idea to think of giving the child a transcript of life. What is meant by a transcript of life? All the conception I have of Japan is life to me. (Mr. Parr.—You use life in two senses.) I think not.

REMARKS ON MRS. LIDA B. MCMURRY'S PAPER ON "PLAN OF CONCENTRATION FOR FIRST TWO SCHOOL YEARS."

SUPT L. H. JONES:

I have admired the skill with which the president has managed these jarring elements; I would rather have continued to enjoy the fun than to make myself a storm center. It is easier to discuss in the abstract than to examine a concrete illustration. Is it a selection of the best possible tangs out of all the past, or of the best things in the presence of the one who arranges the course of study. Now it will be impossible for me to make in ten minutes anything like a full survey.

The first thing presented is a series of topics in literature for the first year of the school life of the child. I would rule out the story of "The Old Woman and Her Pig" and "Little Red Riding Hood." That "These stories, as a whole, are simple, lively, and imaginative, and call out a strong, spontaneous activity of the children," is not sufficient reason for placing these things in a course of study.

The next paragraph says, "They deal with social relations and personal conduct, and also with interesting forms of plant and animal life". Now, if a word or two were added to that statement, it would include a reason, namely. that they so deal with conduct as to set up proper ideals.

I quote also the further statement, "The first story appears very fantastic and unreal to many people, but experience shows that it has peculiar attractiveness and interest to children." Again, I have to say that those are not sufficient reasons for placing that story in a course of study.

Under "Nature Study." "The principal objects studied are types, and while the children do not recognize them as such in this grade, they do not get a very vivid perception of the characteristic typical notions which these animals illustrate, e. g., the dog is the type of the digitigrade carnivora. The children in its study are surprised and pleased to find that it walks upon its toes." "The teacher may well keep these type forms, based really upon scientific classification, clearly in mind, not for the purpose of imposing them upon the children too early, but to point out the centers of observation for children." That is one of the greatest things in this book. Now, I do not believe in concentration in all the forms in which that process has been described, but I do believe in that phase of it. The teacher should select ideas which will continue to work in the children.

The objection to the first story is its absolutely fantastic character with repetition, which makes it dull. My reason against the second is the element of the ghost story, the absolutely horrible, of which the children get too much.

On page 126, is a most admirable statement of the reason for choosing the shepherd dog rather than simply the dog. It should be some individual dog, then the broadening to the shepherd dog, and then to the dog, the whole going from the individual to the universal as explained there.

I make my first severe criticism on page 132 in connection with the number work. Had the matter stopped with the statement that there is no need of separate number work in the first two terms, I would not have objected The work following this statement is what the child has learned somewhere, but not in this course of study. Certainly any attempt at such an application of the number element as is found on that page would be the application of what was learned elsewhere.

I would like to make one point that is a fair outgrowth of what is laid down on page 135 as to nature study. "Continue the study of Lima Beans." "Finish the study of Apples and Plums begun the previous spring." The philosophy of the remaining portion of that page is a thoroughly sympathetic study of plants, as these plants unfold their life. I thoroughly believe in that phase of the work. I wish, however, to make this criticism upon the arrangement here. Considerable stress is laid upon correlating this study with such incidental facts as that we heard the bean referred to some days ago. It is utterly trivial. The mention of it to begin the lesson is enough. On that basis, I wish to say that it seems to me that a flood of light will come upon this whole subject of nature study if we attempt the study of nature not in itself and for itself. But the study of terms that can be made clear in this subject is to be turned back upon human nature. Every quality of plant and animal can by dextrous use be turned back upon man himself. All poetry and high grade literature is based upon this notion. F gurative language is largely based upon the same idea.

MR CHARLES MCMURRY:

The point just raised is one with which we are in full simpathy. The simple fact that the bean was mentioned in a larry story is not sufficient to build a whole fabric of concontration upon. I think the wisest thing is that we shall seect a body of the choicest children's literature, both of hature and of child life or human life; that is, select the choncest of those materials that we can find, and the selection will be based partly upon the desire to bring nature in. For example, it seems to me that The Anxious Leaf, The Pra Blossom, and other such stories are suggested by the Consideration of nature, not primarily but secondarily. We should keep in mind what suggestions the seasons and mature and the whole realm of nature can make for us. Now as we look through that list of suggestions of natural Conce subjects, we shall see many in these stories. Let through that series of suggestions and see what typical, representative science topics have been suggested which are in accord with the season and by following out such other useful studies as history and literature do not suggest, make up our course. It is a matter of experimentation.

It is not our intention in the school which is represented by this course to select literature and history and then allow the science course to be made tributary to that. History and literature on the one hand and science on the other are the two great realms, and these two lines of study are to be kept distinctly before us, and they are to react on each other. These relations are to be purposely looked after, not as they accidentally suggest themselves. We ask not simply what science is suggested by literature, but also what the science furnishes that suggests literature? The whole question is still a matter of adjustment to a large extent.

PROF. W. S. JACKMAN:

The hour is late; I do not feel that I ought to take very much time—It is more to our advantage to pick out the good things in this paper than to lay stress on what we do not approve. An outline can be best understood by the one who makes it. There is an underlying thought which cannot come out through the outline.

I know something of Mrs. McMurry's work, and I know of the spirit in which she labors. She works right down to the children. If I might offer a word of warning, it is this: If the teachers here on the plains should take this, it would probably result in entire failure. No two schools have exactly the same environment. It is the suggestion of this course to lay hold of the immediate environment.

I want to call attention to one point about the subject matter. Someone said yesterday that when subject matter is selected it should be of such a nature that nothing else could be substituted. When the dog and the sheep are selected, there is no special reason given for it; other subjects might do as well.

Another point touched upon by Mr. Jones I wish to call attention to. You will see that the course of study is sug

from a story told with the avowed purpose of making a moral point, I wish to raise a question. For instance, regarding "The Lion and the Mouse," I want to ask, when that story is told and the moral of it impressed, is not the story done with? The science that follows is gratuitous and seems to be "lugged in" So with "The Discontented Pine Tree," there is no logic or pedagogy which requires that the teaching of the moral lesson of that story should be followed by the botany of the pine tree.

Now a word in regard to the number work; the outline suggests the counting of the toe tracks of certain animals in the soft earth. What is the addition which this makes to the moral point of the story? It makes no difference whether the beast had two toes or fifty. So in regard to the number of long, sharp teeth in the dog; if you wish the child to know how many teeth lie has, the fact must be reached from some other standpoint than that of the story, which does not require that they should be counted or described. That is one of my objections to bringing in the science through the literature. I object still further to the literature dependence, proposed in the paper, upon such stories as a means of arousing the moral sense, because I believe the moral standards as shown in the stories have been too low.

I will call attention again to the mouse story. The mouse gnawed the rope and released the lion because the hon had formerly been kind and merciful. Now what is the inference from that? The child says I will not hurt this mouse; some day I may get into trouble, and he, then, may help me. A good deal that passes for morality in teaching history is pseudo-morality. The feeling is implanted that we must be good because some great man, Washington, for instance, was good. It is morality by imitation. Christ was good, but simply imitating him is not the highest morality. The great law is that we must do unto others as we would that they should do unto us. We should recognize the law under which Christ himself acted. He saw what relations must be established and preserved between man and

man and between man and nature if the human race itself was to survive. I claim that the moral standards of the future when these natural relations are commonly understood, will be as much above those of the present as the heavens are above the earth.

All history and literature have been written from the anthropocentric idea, for which as it has been commonly applied, the teachings of modern science afford not the slightest support. For the child, there are read into those most unfortunate creatures, selected as subjects for story and fable, all kinds of false and outrageous characteristics. For instance, note the effect of all the fables of the snake. Find a story of the snake that does not degrade it! I will pay a premium for such a story. Fifty years ago the common ideas about plants and wild animals were very different from what we have today. If an animal received the distinguished privilege of figuring in a fable in the days when fables were written, before he was through with it, he was likely to find himself besmirched with some human vice or passion much at variance with his own simple habits of life. You do not dare to use all the stories you find in literature as instruments for enforcing moral truth; moral standards have advanced from time to time; much less can you use such stories for the purpose of teaching scientific truth. If they must be carefully sifted for the purpose of literature in moral training, they must be rejected almost without exception from the standpoint of science. My notion is this: here are two sides of life, one involving social relations and the other involving the problems of physical life. The two sides are co-equal. We must watch the development of the child. He is not moral nearly so early as we think he is. In the beginning he is a little beast; in childhood, the physical nature is a long ways ahead of the moral; the first and most important problems which concern the child are those which pertain to his physical life.

MR. CHAS. MCMURRY:

I think this is most delightful. We never could do better than to bring our ideas to this crucial test. We agree and we do not agree.

Mr. Jackman is not willing to give any credit to the suggestion of science by literature and history. ample, we believe that these little stories are not simply moral, fantastic, beautiful, interesting, and classical, but that they are the gateway to other useful instruction and especially to lessons in science. He is not willing to admit that the science topics suggested have any value for the sciences. (Mr. Jackman, -A pupil should not get his idea of the scientific side from the story. If you tell the story, how would you teach the science?) I would not say that because certain topics in science are suggested in the story we must teach the science. There are more science topics suggested than we need to teach in any school. If the children have had the story of the apple blossom which brings in also the dandelion, that story turns the attention of the children to those two flowers; the flowers are mentioned; that is not science, I know. In the future, if they have occasion to take up the dandelion or the apple blossom they will turn to it with more delight. (Mr. Jackman. - What is your apperceptive material on which you base the narration of that story?) Our purpose there is to bring the story home to the child as well as we can. (Mr. Jackman.—The value of the apple blossom in that story depends on the child's notion of the apple blossom.) (L. H. Jones. Which shall be first? Not both at once.) Your point is, why should not the science come first that the story may mean more? If we take the stories from literature first, and treat them as they ought to be treated, in the future when the children turn to the science topics they will approach them with more interest. As one of the German writers has said, a child who has known any animal or plant in a fairy tale and has learned to think of it with human sympathy will transfer that interest to nature.

DR FRANK MCMURRY:

Just one point; it is a fundamental one. Mr. Jackman's point was that logically nature work must precede. He mank to say psychologically. (Mr. Jackman. -Now, Mr. McMurry, what is your apperceptive material?) The child

has seen the apple blossoms. (Mr. Jackman.—The whole point is conceded.) Just as in the study of Evangeline or in the geography of the Mississippi we have a fair knowledge before the literature will introduce us to those subjects. We start with that material which appeals to us most forcibly. It is the study of a human being that has introduced us into foreign countries. Our strongest interest is in man.

DR. VAN LIEW:

I did not get a very full discussion of my paper yesterday. Mr. Jackman said that a child is a little beast, in the beginning. I want to call your attention to a remark of Oliver Wendell Holmes, "No child can appreciate the absolute beauty of right until he learns that it pays." If you can show me a child that does not begin that way, I will take it back. (Mr. Jackman.—In nature he finds that it pays and in history too. A good many history teachers do not reach far enough.) Will you name some moral truth that you draw from nature study? (Mr. Jackman.—I think examples are most dangerous things.) Getting off the ground is the most dangerous thing. (Mr. Jackman.—I will stay there if you will.) The law of gravity comes in.

I understand that you think an appropriate illustration is the beautifully formed tree. Is the illustration that if my life is to be beautiful it must be like that tree? It certainly is not the same kind of beauty. The point I want to make is that the moral inspiration is superimposed by you. (Mr. Jackman. - You study a human character; now what is the specific thing in that character that makes you better? Put your finger on that, as you ask me to do in the study of the tree.) Have you not just said in the case of the tree that I must be like the tree? (Mr. Jackman.-I said I must be obedient to the laws that govern me as the tree obeys its laws.) I think that we get at those laws through the numerous examples of integrity, of self surrender. It is not quite fair to say that it is not imitation in the case of the tree. (Mr. Jackman.-It is present in both the study of a tree and the study of human character, but in both cases the moral teaching rests upon something deeper than imitation.)

FRANK MCMURRY:

The law involved in the case of the man is of a different quality from that involved in the case of the tree. It is the laws that control the man which we wish to imitate.

COLONEL PARKER:

Why has nature study been kept out of our schools for the ages past? As I showed on yesterday, because it would make the masses rise against the classes.

CHARLES MCMURRY:

Our friends are unwilling to concede the value of history, and yet they are introducing historical proofs.

MR. JACKMAN.

I have not decried history. I have simply tried to show that natural science is entitled to quite as high a place as our friends from Normal claim for history and literature.

SUPERINTENDENT SUTTON, Houston, Texas.

I would like to ask Mr. Jackman whether the chief ground for the introduction of science into the schools is the ethical ground. There are some of us that would be glad to see the discussion turn upon this point, as would Mr. Jackman and Mr. McMurry, I am sure.

MR. JACKMAN.

I think so. There is nothing to work for but character. I believe Mr. McMurry did not show where his missing link is. I will help him out, Charles McMurry expresses the point that there is nothing good but will. I deny this. One who knows his place in nature and holds it has strength of character.

NOTE. - In reply to the above argument of Prof. Jackman, I urged the following reasons at the Joliet meeting of the Northern II, more Teachers' Association, 1895, to which Prof. Jackman refers.

This statement brings out clearly the difference between Mr. Jackman and myself. Kant is the author of the statement that there is nothing good in the world except good will. This means, of course, nothing morally good. The will must decide in all cases of moral action. It has the power of choice between right and wrong, and this brings moral responsibility. The attitude of the will determines the moral quality of any act. As trees and plants have no will, no choice, the phenomena they exhibit have no moral quality. They are not examples of moral action and can, therefore, teach no moral lessons.—C. A. MCMURRY.

COLONEL PARKER:

Our McMurry friends persist in insisting that literature and history are the center of all educational movement. I repeat that the child is the center, and educational values are to be determined by what the child needs. Let me repeat: We do not claim that nature is the center of movement.

Our McMurry friends have presented us a great amount of literature, excellent literature, far better than we have had before. The Normal University of Illinois is now influencing the whole state and all its teachers for something better. This is a movement much to be desired. The only criticism I have to make upon the presentation of our friend, Charles McMurry, is that it is slightly tinged with dogmatism; he insists upon history and literature as the center; he does not reply to the questions I asked in regard to why nature was excluded from the German schools for many years; he does not take up the historical environment of the theory of Herbart. I wish to ask, here and now, of him, is it true that nature studies were kept out of the German schools for the reasons I have given?

MR. VAN LIEW:

I believe we should make some honest answer to Col. Parker. Yes, I think it is undoubtedly true that governmental influence had a great deal to do with restrictions placed upon the common German course of study. Reference to any good history of method, such as Kehr's, will show this. The government had certain ends to achieve and certain ideas to conserve; it demanded emphasis of

that only which served its purpose. This affects naturestudy. But now it has been put into the schools, and all we are getting at is the question of what relation it sustains to other subjects and to the education of the child.

COLONEL PARKER:

I thank Dr. Van Liew for his frank answer to this question. To my mind, his answer settles the point now at issue. Through history and literature, the child can be adjusted to the society, state, and government; through the proper study of nature he can only be adjusted to the truth of the Eternal God.

Note,—Col. Parker's question deserved a much fuller reply than it received at Denver. The tone of confidence in Col. Parker's question seems to me very misleading. It seems altogether likely that the fear of natural science as a freedom and liberty breeding study had something to do with keeping that study out of German schools, but that this is the chief reason seems to me wholly improbable both historically and rationally considered. The fact is that for many years natural science has been much more extensively and systematically taught in German than in American schools. Now will it be claimed that the fear of liberty has kept nature studies out of our own schools? The causes that have kept nature studies back have been far deeper and more widespread than fear on the part of a few petty tyrants. Consider for a moment what these causes are:

1. The immense conservative influence of the old classical and literary studies in all the modern nations, just as marked in freedom-toring America as in prince-ruled Germany or England, is the great dominant fact in modern educational history. This surely has had

ten times the influence of any political fear.

2 The problem of how to teach natural science in the common schools has never yet been solved. We stand today in the presence of this problem almost as helpless as Comenius. Rousseau, and Basedow The great majority of even good teachers in Germany and America today do not know how to teach natural science as well as they know how to teach other things. And this, I think, is not so much because they are prejudiced against the natural sciences, as because the problem of good science teaching is inherently difficult. With all our task and experimentation on this subject no one has yet laid out a clearly defined course of study in natural science for the eight grades.

In the Denver meeting Col. Parker's statement seemed to me too extravagant to call for serious contradiction.—Charles A. McMurky.

R. H. BEGGS:

It seems to me that these advocates of nature study make a mistake from their standpoint. There are two trees growing side by side and the hardier takes all the nourishment of the soil leaving the other to perish. There are two birds striving for the same article of food and the stronger one gets it, and the weaker dies, and so throughout nature. "The fittest alone survives" and it is right that it should be so. These persons might have said let us put this nature study into the schools to teach the survival of the strongest. The whole course of nature study shows that might makes right So I think that the Prussians, in banishing nature study, have made a mistake if they wish to foster in their schools a belief in their form of government. They could get arguments there that they rule in Germany because they are the strongest. I can see how they might have put nature study into their schools and taught it so as to make their position stronger. The study of nature teaches us that the stronger have the right to thrive at the expense of the weaker and that the weaker must go to the wall. The Prussian authorities could hardly have failed to see this, hence it would seem that they had other reasons for opposing nature study than fear of its inculcating the doctrine of equal rights.

GEO. P. BROWN:

As I have listened to this discussion, the thought has come to me that this disagreement is mainly a disagreement of temperaments, of individuals. I confess that I am inclined to make the central subject history and literature. I cannot, however, see any reason for making that the basis for others—I think I can see the reasons of others for making science the center. Is it not a question of temperament?

L. H. GALBREATH.

It is not a question as to whether to select one or the other. The correlation must be a psychological correlation. If we are to fit a man to live in his environment, our work will call equally for science and history. He will receive

moral ideas from what history and literature can give him and guidance to realize those ideas from what science can give him; history will furnish the motive and science the means. Quality of character may come from history and literature, but strength in realization from science training; therefore, let us quit the discussion as to the relative importance of the two.

FRANK MCMURRY:

I value peace, but peace is not possible on those grounds. When it comes to a question of studies, shall I choose a story for its own sake which suggests plants or shall I choose a story for the sake of the plants which it introduces?

L. H. JONES:

The mouse story is capable of more than one explanation. I have seen a child wonder why the lion did not gnaw the net for himself. (Mr. Jackman —He could gnaw it better than the mouse could, and was a fool that he did not.) The lion tried to break the net and the story shows how the smaller creature accomplished what the larger could not. Emerson shows the same thing in The Mountain and the Squirrel. Indeed the higher purpose of the study of nature is the formation of a large fund of ideas applicable at first to a description of material things but by analogy capable of explaining vividly the things of the spirit. This is not simply a question of precedence, but as between the material and the spiritual, I want to stand for the spiritual. The poet says:

The night has a thousand eyes,
The day but one:
But the light of the whole day
Goes out with the setting sun.

The mind has a thousand eyes,
The heart but one;
But the light of a whole life dies,
When love is done.

COLONEL PARKER.

The center of the question is this insistence on the part of our McMurry friends that history and literature make the center of things. I believe that the child is the center. He is to determine what he is to have by his nature. I believe in these stories, they are good; but the question is to be discussed. Is the child to be the center or is history? Another question. Is not God to be found in all nature?

FRANK MCMURRY:

I do not like to see us trying to establish harmony at the sacrifice of the real problems. Now, when the Colonel stood here speaking to you, he had you as the center of his thought, the kernel, so to speak. Likewise, we as teachers have eight studies but we must have one as a kernel around which to range the others. (Amid cries of "Prove that," the chairman announced that the hour had arrived for closing the discussion.)

NOTE. -The oft-repeated expression, moral education through instruction, while it throws into strong relief the central notion in Herbartian pedagogy, at the same time suggests a radical misconception of Herbart's doctrine. This misunderstanding is very clearly and honestly expressed by Superintendent Gilbert and Principal Beggs. Mr. Gilhert says "How are you to make a strong, upright, useful life by instruction9 The way has not, to my knowledge, been discovered." Mr. Beggs says: "We need not merely a development of the moral sense, but power to act in accordance with our moral judgments." Again: "In the selection of the subject matter of instruction and in determining the method of presentation, we must not lose sight of the vital importance of developing the power to follow, as well as to form, beautiful ideals, etc." These statements appear as criticisms of Herbart As a matter of fact, they are very clear expressions of ideas upon which Herbart laid the greatest emphasis, more emphasis probably than any other one who has written on education.

Instruction in the examples and principles of right conduct does not insure the development of moral character, but it is one of the great and necessary steps in the process of character development. One of the strongest points in Herbartian pedagogy is the emphasis laid upon the step of application—that is, the working over of knowledge into the ordinary use and habit of life. This applies also to moral education through instruction. One of the fundamental ideas of Herbart was to apply the moral notions gained through instruc-



This grasp of any great epoch of national life in its entirety brings it into close touch with the masterpieces of interature of that epoch. A great masterpiece of literature gives powerful expression to the ruling ideas, the life and spirit, that characterize any age. This is not a matter of bare knowledge, but of the strongest sensibilities and volitions. The avenues through which the child must pass in order to partake of the spirit and enterprise of past epochs of listory are the masterpieces of literature, which, better than anything else, reflect the life and spirit of those ages.

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THE THEORY OF CULTURE EPOCHS IN THE CHILD AND THE RACE.

Dr. C. C. Van Liew presented the following theses for discussion before the Schoolmasters' Club, at Bloomington, Ill., October 4 and 5, 1895:

Ŧ.

The child, in attaining a grasp of the social order and civilization into which it is born and the power to adjust itself to that order, must pass through those stages of spiritual development that have been essential in the evolution of the race.

This, the so-called theory of the culture epochs, is an application to the psychical development of the child of the theory of recapitulation which the doctrine of evolution regards as established for the physical development of the individual.

The theory may be argued from both the formal and the material points of view.

As to form, the analogy between individual and generic development may be briefly indicated as follows:

II.

- (a) In both child and race, mental development proceeds from absorption in the mass of sense perceptions, through the highly imaginative or mythical and legendary interpretation of phenomena, to the higher historical, philosophic, and scientific interpretation.
- (b) In both child and race, the development proceeds from the grosser, uncontrolled forms of impulse, through stages of fickleness and caprice, of childish trust in the patriarchal guidance, of rebellion against the law and the lesson of necessary subjection to the law, and of rational insight into the fitness and voluntary self-subjection to the law, or autonomy.

(c) Similar lines of comparison may be drawn for the development of the interests and emotions which are, however, very closely associated with and implied in the intellectual and volitional development of the individual and the race.

As to material:

III.

The subject matter of development, i.e., the stimulus to development found in both the natural and cultural environment, is very largely the same for the race and for the child, thus giving occasion for the parallelism of development.

IV.

Education bespeaks for the child a natural development of his powers. In so doing it implies the possibility of a right principle of succession for the materials of instruction and the educative activities.

V.

The principles of succession that have thus far been applied may be briefly summed up as (1) the principle of the relative ease of acquisition, which is an imperfect attempt to recognize the limitations which the child places upon the formation of the curriculum, and (2) the principle of the logical unfolding of the subject matter, which recognizes the limitations that the nature of the subject places upon the formation of the curriculum.

VT.

Neither of these, alone, can be made the chief principle of succession in the curriculum, for neither adequately meets the requirement of sympathy between the child and the materials that are to stimulate his development at any given stage.

VII.

There is need of a more perfect principle of succession, (1) because of the imperfection of the principles stated in thesis V when taken alone, (2) to give unity and purpose to

those materials that will best meet the requirements imposed by the child and the aim of instruction, (3) to meet and utilize the child's developing interests and impulses, and (4) to furnish the "leading motive" to the work of concentration.

VIII.

The principle that meets these requirements most satisfactorily is that of the culture epochs, since it seeks to recognize the growing interests and powers of the child by introducing organic wholes of subject matter corresponding in general to each successive stage of development, and looking toward the ultimate end of education.

IX.

The application of the theory of the culture epochs is limited by the following facts: (1) Each child is born into the world with a constantly increasing store of inheritance, thus shortening, to a slight degree only, the range of recapitulation. (2) Progress in civilization and culture places about each child a somewhat changed environment. Hence, the child finds himself in a present environment, the present's expression of past ages, while at the same time following an order of spiritual development that characterized the earlier growth of the race. The modern environment tends, therefore, to hasten the development of the earlier stages, and to render the parallelism of the latter stages less clearly marked.

X.

While the Theory of the Culture Epochs is still open to the researches of comparative history and psychology, it is sufficiently well established to admit of application in education, at least along the following lines:

- (a) It calls for an historical movement in the curriculum, in which the chief theme shall be furnished by history and literature. (Comp. McMurry's Special Method in History and Literature.)
- (b) It bespeaks for the selection of material in history and literature an emphasis of classic periods and classic

ton, and the training of teachers. The book may be ob-

- 3. GENERAL METHOD, by C. A. McMurry. A simple stroduction to the leading ideas of Herbart, as The Aim 'Education, Relative Values, Interest, Induction, Appertuon, Concentration, and the Will, Public-School Public Ing Co., Bloomington, Ill. Price, 75 cents.
- 4 UFER'S INTRODUCTION TO THE PEDAGOGY OF HER-DAM P. Translated by J. C. Zinser, edited by Charles De Garmo. Published by D. C. Heath, Boston. Price, 75 cents. This is the best popular introduction to Herbart that has been written in German. Its two leading chapters give a clear notion of Herbart's system as based upon psychology and ethics, while the third chapter on pedagogical application shows how to select and handle the materials of instruction. Herbart based his system of pedagogy consciously upon his psychology and ethics, and both are here briefly but clearly explained.
 - LANGE'S APPERCEPTION, translated by the Herbart the and edited by Charles DeGarmo, published by D C Heath & Co., Boston, price \$1. The idea suggested by the term apperception has been generally accepted as a contribat on to education. Lange's treatment of this subject is more complete and scientific than that of any other writer. The first hundred pages of this book will be found heavy readake for the majority of teachers as it is chiefly psychological and not always simple and clear. It is not, therefore, the less book with which to begin the study of Herbart The after half of the book is more interesting and more distortly practical. For one already interested in Herbart's deas thus book will be found valuable for a deeper and more matained study.
 - 6 The Science of Education, by Herbart, translated by Henry and Emmie Felkin. D. C. Heath & Co., price \$1 This is a valuable book for those wishing to get a fuller knowledge of Herbart's life and work. The first fifty-six baces give a brief biography of Herbart and a description of the philosophical and pedagogical writings. These are

ment is based upon a misconception of the thought which the doctrine of the culture epochs is seeking to present. It merely claims a parallelism of the psychical development lying back of the specific products which the race has offered in its history on the one hand, and the manifestations of the growth of the child on the other. Hence, while it claims that the boy, for instance, has and evinces at certain stages of his development traits that, in given environments, have produced in the history of the race, say, the bandit, the cowboy (in the less desirable sense), or the pirate; it by no means claims, what would be a foolish trifling with the very idea of education, that each boy should be a pirate or a bandit in order to be rightly developed. But it would claim that these same instincts, the source of wholesome as well as degenerate developments, should be seized and rightly utilized at the height of their development. It would not claim that because the race in its tendencies to idolatry or anthropomorphic conception of the deity, has often degraded its concept of the deity, the child should therefore be fed upon the lowest forms of religious thought first. But it would claim that, from the very nature of things, the child must start his idea of the character of the deity by the unconscious union of those traits which it conceives to be noblest in the human beings it adores, as the father or mother That the child's God has a human form is due to the fact that the child still dwells in the realm of sense images, as does the early race, and it would be folly to expect it at first to ascribe noble traits merely to the high abstraction of the deity as pure Again, the theory of the culture epochs would by no means advocate that the child be given a false explanation of natural phenomena, because, perchance, the race harbored such an explanation in its infancy. But it would recognize that the child's own naive grasp of the world of physical phenomena is a mythical one, as was that of the race; that this lack of a knowledge of natural law, is in both the race and the child, an especially favorable opportunity for the play of the naive and poetic imagination. and it would seize this opportunity just when it is most susceptible to development. So with the other stages of development.

The argument against the culture epochs stated at the beginning of the preceding paragraph, also implies that this theory would neglect all regard for the aim of education. On the contrary, it would emphasize it. It would seek to determine what stages have been essential in the development of the race; it would eliminate those that have been non essential, and it would present, in the light of the ethical aim of education, that material of culture which is the product of the great movements of human development. Hence the succession of subject matter in hterature and history as it is rapidly being applied today.

It has been claimed that child-study must yet do a great deal before this theory can be established. (Dr. Krohn's objection.) This is true if we refer to the details of the parallelism between individual and racial development. Here there is, indeed, yet room for a great deal of research, as well as in the associated field of comparative history and culture. But the general outline of the parallelism has been well enough established to admit of fruitful and suggestive influence upon the curriculum.

Is it not wrong, Dr. Krohn asks, to seek to establish any given theory, as that of the culture epochs, by the work of child-study? Yes; if that alone is just what has been attempted. In the brief history of child-study two schools have sprung up divided on the question as to whether or not any theory should be used at all in scien time research, either as a guiding star or as furnishing a suggestive problem. To attempt merely to establish a theory is one thing; to test it, to use it as a problem is another. The theory in question has received the benefit of careful and honest investigations in the light of facts, and it is not without weight that many thinkers have come upon the same thought while pursuing quite diverse lines of inquiry.

I quite agree with the valuable thought of Prof. Tompkins, that, by a cross-cut of all classes of humanity today, we can find all the stages of development, seen in the past of the race. This is in fact a substantiation of the theory of the parallelism. I also see no reason why modern materials representing the early stages of development should not be used, providing they can prove their classicity. I refer especially to literary products.

Prof. Tompkins' argument that the movement is not from the race to the child, but from the child to the race (to be found in The Child-Study Monthly, Vol. 1, No. 5), states but half a truth. I admit at once that the individual must, from the very nature of things, be the bearer of racial progress. On the other hand, what child is not the product of his race, which has determined irredeemably a large part of his environment as well as much of his temperament? The argument continues-that the mere fact of parallelism between race and child, is no solution of either development. True, in Mr. Tompkins' sense. Education, however, seeks to transmit, among other things, a given body of developed culture. This culture is the expression of racial development. It is to be grasped, assimilated by the child. It must inspire him. To do this best, say the Culture Epochs, seize at the height of their susceptibility, those interests, impulses, instincts, mental capacities, that have found expression in the race in given culture products: present these products at that time. The above argument of Prof. Tompkins seems to me to ignore the fact that the modern "living world" is a product of past efforts -- that the past is ever potently present.

I admit the difficulty which Prof. McCormick points out in our large cities where foreign children are often classed with Americans far more advanced in their development. The problem is one with that (mentioned by Dr. McMurry) of the co-education of the blacks and whites--races that are undoubtedly in very different stages of development. The problem exists under any theory. I think that environment will be the chief factor in determining the solution. The difficulty lies not so much with individuals, as with the mass that is placed in an inferior environment and is able to change it but slowly.

Pres . ILL.

PROF. DAVID FELMLEY, of Normal:

The phenomena of instinct strengthen the culture epoch theory. An instinct is the faculty of acting so as to attain the drain ends without previous knowledge of the ends. An instinctive act is due to an inherited nervous adjustment, which reacts at the appropriate stimulus. Every animal is a bundle of such preorganized reactions. The habitual acts of the parent build up a nervous mechanism. The child interests the mechanism with a tendency to perform the act the let suitable conditions. Man is endowed with more in the lettive impulses and instinctive interests than any other than any

Most instincts are transitory. They ripen at a certain period, prompt us to act, if conditions are favorable, then factor away. If the instinctive acts are performed, they sive rise to a habit, and subsequent acts of this class are to be regarded as habitual and not instinctive. If habits are formed when the instincts ripen, they are rarely formed at [21]

The great thing in teaching is to seize the happy moment when the child's instinctive interest in the subject is at its height, so that he may gather a stock of knowledge and acquire a habitual interest whose momentum will carry hits along after the inherited spontaneous interest has died out.

We may possibly discover these happy moments by close of servation of the child, but it would be folly to ignore the arct that the study of race-development affords. The instructs due to the special activities of our fathers come to mea turnly after those due to our grandfathers. In childhood, if we wall play and fairy-tales: in youth, we hunt and fish, we lin the exploration of nature, in travel and adventure; in middle-life we are swallowed up in the money-getting activities of the modern world.

The fullest and best life is the life that in each epoch bits itself to saturation with the appropriate mental food. The appropriate food for each of our spontaneous interests

LIST OF BOOKS.

The following is a descriptive catalogue of books on He bartian pedagogy:

- 1. DE GARMO'S HERBART AND THE HERBARTIANS (published by Charles Scribner's Sons, New York. Price, \$1.0) is the best book in English as an introduction to the Herbartian movement in Germany and America. The style is simple and interesting, and the biographical, historial, and critical materials are handled in a lively, compresensive way. This book opens up the whole field of practical and theoretical pedagogy, and will lead any spirited teacher to follow up the problems suggested in other books.
- 2. OUTLINES OF PEDAGOGICS, by Prof. W. Rein, translated by C. C. and Ida J. Van Liew. This book gives, in simple but comprehensive form, the standpoint of the chief living representative of the Herbart school in Germany, Dr. W. Rein. Price, \$1.25.

The second and larger part of the book on "Theoretical Pedagogics" will prove the more important part for American teachers, as it deals with those leading doctrines of Herbart, which are attracting wide-spread attention in this country, such as the aim of education as based upon psychology and ethics, instruction and its materials and methods, training and government. The treatment at certain points is necessarily somewhat abstract, because of its brevity. Important points are not discussed as fully as could be desired, but the statements of doctrine are reliable and of special interest as coming from a man like Dr. Rein, who has done more than any one else to apply and realize these doctrines in the practice of the common school.

The first part on "Practical Pedagogies" will be of interest to those who desire to get a German view of the great problem of school organization. Some of the chief topics are home education, kinds of schools, school administra-

on, and the training of teachers. The book may be obused from C. W. Bardeen, Syracuse, N. Y.

- 3. GENERAL METHOD, by C. A. McMurry. A simple roduction to the leading ideas of Herbart, as The Aim Education, Relative Values, Interest, Induction, Appertion, Concentration, and the Will. Public-School Publing Co., Bloomington, Ill. Price, 75 cents.
- 4. Upen's Introduction to the Pedagogy of Hert. Translated by J. C. Zinser, edited by Charles De theo. Published by D. C. Heath, Boston. Price, 75 to This is the best popular introduction to Herbart that has been written in German. Its two leading chapters are a clear notion of Herbart's system as based upon psytology and ethics, while the third chapter on pedagogical application shows how to select and handle the materials of instruction. Herbart based his system of pedagogy consists upon his psychology and ethics, and both are here until but clearly explained.
- LANGE'S APPERCEPTION, translated by the Herbart Clab and edited by Charles DeGarmo, published by D. C. Heath & Co., Boston, price \$1. The idea suggested by the term appearention has been generally accepted as a contribution to education. Lange's treatment of this subject is more comparte and scientific than that of any other writer. The list hundred pages of this book will be found heavy reading for the majority of teachers as it is chiefly psychological and not always simple and clear. It is not, therefore, the best book with which to begin the study of Herbart. The latter half of the book is more interesting and more directly practical. For one already interested in Herbart's deas this book will be found valuable for a deeper and more sustained study.
- The Science of Education, by Herbart, translated of Henry and Emmie Felkin. D. C. Heath & Co., price \$1 This is a valuable book for those wishing to get a fuller an wiedge of Herbart's life and work. The first fifty six laces give a brief biography of Herbart and a description of the philosophical and pedagogical writings. These are

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followed by a translation of his principal works on education In German, Herbart's writings on education constitute classic of rare force and excellence of style. The translators have not given us an English classic, but at least a farendering of Herbart's ideas. Herbart's own thought must remain the fountain from which much must be drawn in the educational movement.

7. DE GARMO'S ESSENTIALS OF METHOD, published by D. C. Heath.& Co. Boston, price 65 cents.

This little book endeavors to reveal the leading principle of class-room method as embodied in what the Germans call the Formal Steps of instruction. The formal steps have found a wide acceptance in Germany as a well founded pedagogical method of handling important topics in any study. It seems probable that the formal steps as a combined inductive-deductive method of teaching are to have a great influence upon American methods of teaching. It is an effort to combine all the important principles of instruction into a well organized and logical (also psychological) method of procedure.

8. THE CONNECTION BETWEEN THOUGHT AND MEMORY, by Dr. Herman T. Lukens. D. C. Heath & Co., Boston.

This book is just out of press and is a liberal rendering into English of one of the most popular books of the Herbart tendency in German. The scholarly manner in which this excellent book has been rendered into simple, idiomatic English by Dr. Lukens gives promise of its becoming as popular in this country as in Germany. In his short introduction, Dr. G. Stanley Hall recognizes the value of Dr. Luken's work. In the same connection Dr. Hall gives expression to the following criticism: "Unlike too many members of this group, Dr. Lukens, although thoroughly trained in Herbertian pedagogy and in sympathy with it, does not regard it as the consummate formulation of educational theory nor attempt to apply its rubrics blindly and without change to the very different material and environment of American pedagogy, but has felt it necessary to supplement Herbart both by modern child study and by

me practical acquaintance with experimental psychogy."

If Dr. Hall really believes anything so grotesque as us, that American schoolmasters have come back from frmany with the notion that they have found across the ster "the consummate formulation of educational theory are applying its rubrics blindly and without change to very different material and environment of American bagogy," we are sorry for him and are inclined to think that somebody has been playing upon his credulity

9. MANUAL OF EMPIRICAL PSYCHOLOGY, by Lindner, translated by Dr. Charles DeGarmo, published by D. C. Heath & Co., Boston, Mass., price \$1.

This is one of the most popular efforts to present the psychology of the Herbart school in a clear and simple form. This is a book for careful study and sustained effort on the part of those disposed to such effort.

10. A TEXT-BOOK IN PSYCHOLOGY, by J. F. Herbart, translated by Margaret K. Smith, published by D Appleton & Co., N Y., price \$1.

Herbart has been generally termed the father of modern empirical psychology, and the entire modern movement in experimental and physiological research has a close relation to him as the founder of the tendency. This is Herbart's chief work on psychology. The article in the Encyclopedia Britannica on Herbart is important as a review and critique of Herbart's psychology.

It is not our intention to give a full list of all books and articles in English bearing on Herbart's doctrine. Such a list will be found in DeGarmo's Herbart and the Herbartians, at the close, and in Outlines of Pedagogics by Rein and Van Liew.

In spate of the number of books on Herbartian pedagogy published in this country since 1890, a good deal is yet to be done before teachers will readily feel the stimulus and power which naturally spring from the study of Herbart's doctrines.

Translations from German into English are generally apt to be a httle heavy and dull to American readers. The

literature of Herbart in this country will be greatly enriched when American teachers, after practicing with these doctrines in their own schools, write from the standpoint of full experience with the rich materials of our own course of study. We have only begun in this country to apply Herbart's ideas to the specific problems of our different school studies as well as to the general plan and organization of the school course.

The foregoing list of books in English has been arranged in the order in which they may be successively taken up by a club for reading and study. It is hardly necessary, however, that all these books should be studied.

For a shorter course for clubs we suggest the following as numbered above:

- 1. DeGarmo's Herbart and the Herbartians.
- 4. Ufer's Introduction to the Pedagogy of Herbart.
- 5. Lange's Apperception.

When clubs are formed and a number of books needed, it is probable that all the publishers will give a reduction in price. The chairman of each club will do well to write to the publishers for price-list and special terms to clubs before ordering books.

A few of the leading German works of this school will be noted, as follows:

The best edition of Herbart's own works on education is Herbart's Pædagogische Schriften. Ed. by Willmann; 2 vol. Leipzig.

Stoy's Encyclopædie der Pædagogik. Leipzig. Ziller's Einleitung in die Allgemeine Pædagogik. Leipzig.

Waitz's Allgemeine Pædagogik. Brunswick. Dörpfeld, Denken und Gedächtniss. Gutersloh. Lange, Ueber Apperception. Plauen.

Willmann, Pædagogische Vortræge. Leipzig.

Ziller, Grundlegung zur Lehre vom erziehenden Unterricht. Leipzig.

Ackermann, Ueber Concentration, Dresden. Th. Wiget, Die formalen Stufen Chur. Rein, Pickel, Schiller, Theorie und Praxis des Volk hulunterrichts. 8 volumes. Leipzig.

Beyer, Die Naturwissenschaften in der Erziehung's thule. Leipzig.

Ziller, Regierung der Kinder. Leipzig.

PLAN AND PURPOSE OF THE NATIONAL HERBAI SOCIETY.

LOCAL CLUBS AND THEIR WORK.

The National Herbart Society for the scientific Stop of education was organized in Denver at the late meeting of the N. E. A. Its purpose is to study and investigate and discuss important problems in education. Its members of not subscribe strictly to the doctrine of any one leader, but seek for fair and thorough discussion. Some members of this society are strongly tinctured with the educational doctrines of Herbart, others are not, and it is right to expect an honest search for truth.

An executive council of nine members has the control of the society's work. They are as follows:

Charles DeGarmo, Swarthmore College, president: Nich olas Murray Butler, Columbia College; John Dewey, University of Chicago; Wilbur S. Jackman, Cook County Normal School; Elmer E. Brown, University of California; Frank McMurry, University of Buffalo; Levi Seeley, State Normal School, Trenton, N. J.; C. C. VanLiew, Illinois State Normal University; Charles A. McMurry, Normal, Illinois, secretary,

The society was organized for the aggressive discussion and spread of educational doctrines, and it desires to draw into its membership all teachers, students of education, and parents who wish to keep abreast of the best thought and discussion. It publishes a year book six weeks before the N. E. A. meeting, which contains two or more complete monographs on important topics carefully worked out by specialists in educational fields. The year book is sent free to all regular members. In addition to the year book the society, through its secretary, will send free to each member one or more additional pamphlets during the year.

The first year book was published before the Denver leeting and sent to members as a preparation for the disussion of its contents at the Denver meeting. The first ear book contained four articles, as follows:

Most Pressing Problems Concerning the Elementary surse of Study, by Pres. Charles DeGarmo.

Concentration, by Dr. Frank McMurry.

3A

The Educational Theory of the Culture Epochs, by Dr. C. Van Liew.

A Plan of Concentration for First Two School Years, Mrs Lida B. McMurry.

These papers were quite fully discussed at the sessions of he Herbart Society at Denver.

For the sake of those teachers and local clubs desiring to pursue a regular course of reading introductory to the dectrines and practice of Herbart, a series of books and readings will be recommended.

The present Supplement is issued in November, 1895, second supplement, containing brief discussions and otices relative to the second Year Book, will be sent out all members about April 1, 1896, or sooner.

Regular yearly membership in the National Herbart Society may be secured by the payment of one dollar. This entitles each member, without further cost, to receive the Year Book and each supplement at the time of its issue. Persons not members may receive copies on the following terms:

Year Book, 50 cents. Each supplement, 50 cents.

A reduction of twenty five per cent will be made for orders by members of half a dozen or more copies.

LOCAL CLUBS.

A plan has been formed for the organization of local clubs of those wishing to study the Year Book, and other interature furnished by the National Society. When four or more members wish to form a local club, the membership is fixed at 75 cents for each person. They will elect a chairman, who will conduct the correspondence, receiving

the Year Book and Supplements for the club, sending the money, and forwarding all questions and other communications to the secretary of the National Society. The local clubs may also wish to take up the additional course of reading outlined in this Supplement. Each member of local club is entitled to a copy of the Year Book and a copy of each of the Supplements.

For the organization and conduct of a local club the

following suggestions are offered:

- 1. Gather together four or more persons who are willing to spend time regularly in reading and discussing the literature of education.
- 2. Appoint a chairman of the local Herbart Club who will promptly and energetically carry out the plans of the members, arrange for regular meetings, send in subscriptions, order books and supplements, etc.
- 3. Let the club appoint a meeting once a week, or once in two weeks, for an hour's review and discussion of the literature furnished or suggested by the National Society.
- 4. Plan for ten or twelve weeks in advance a series of readings of definite articles in the Year Book or of other books or monographs. Let each meeting hold to a close discussion of some chapter or portion of a monograph previously read and studied.
- 5. At each meeting one of the members of the club should present a well prepared paper discussing, reviewing, or criticising the subject in hand.
- 6. Each member should make written notes on his readings which may be offered as criticisms, questions, or remarks on the subject, following the introductory paper.
- 7. Dr. De Garmo's "Herbart and the Herbartians" is suggested as a suitable book with which to begin the study of Herbartian principles. (Published by Charles Scribner's Sons. New York; price, \$1.00.) Later, the monographs of the Year Book may be taken up as more detailed and illustrative discussion of important doctrines or theories.
- 8. In the discussion of important topics, such as apperception, interest, concentration, culture epochs, etc., plan

series of comparative readings from several books and uthors.

The purpose of the National Society is to give to the octrines of Herbart, as of other educators, a thorough udy and criticism. Attention will therefore be called in the supplements to criticisms and discussions of these doctines from whatever source.

It is further the purpose to test all theories by the undard of practical usefulness, and in the midst of all poretical studies to keep an eye upon practical applications.

Those wishing to become members of the National Society, either singly or in clubs, should send the membership feeto the secretary.

All communications should be sent to

CHARLES A. McMURRY, NORMAL, ILL.,

Secretary of the National Herbart Society.





SECOND SUPPLEMENT

TO THE

HERBART YEARBOOK

FOR 1895

INTEREST AS RELATED TO WILL

BY

DR. JOHN DEWEY

OF THE UNIVERSITY OF CHICAGO

CHARLES A. McMURRY

REPRINTED 1899 BY THE SOCIETY

PRINTED AT The University of Chicago Press CHICAGO

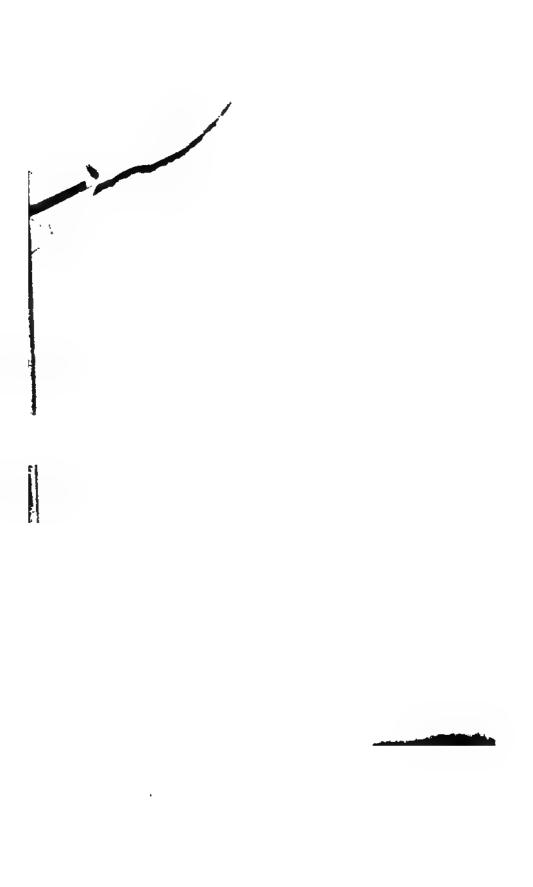
TRAINING

PREFATORY NOTE TO SECOND EDITION.

In this second edition considerable change has been made. In the first place, I have tried by excision and rewriting to state the underlying psychology in somewhat less abstract and formal fashion. In the second place, some portions, especially of Part III, were originally called out by the state of discussion when this article was first written. The only excuse for controversy is to make itself unnecessary, and I believe there is sufficient advance in mutual understanding to make possible considerable omission here. The space thus saved has been given to a fuller discussion of the more distinctly educational aspects. I would suggest to those specially interested in the educational side to read Parts I and IV first, and more thoroughly; Parts II and III afterward, and more casually.

Dr. Charles DeGarmo has supplied this second edition with topical headings to bring out more distinctly the significant points under discussion.

See p. 40 and third cover for terms of membership and list of publications of the National Herbart Society.



INTEREST IN RELATION TO TRAINING OF THE WILL.

Dr. John Dewey, University of Chicago,

INTRODUCTION.

THERE is much the same difficulty in isolating any educational topic for discussion that there is in the case of philosophy. The issues are so interdependent that any one of them can be selected only at the list of ignoring important considerations, or else of begging the question by bringing in the very problem under discussion in the guise of some other subject. Yet limits of time and space require that some one field be entered and occupied by itself. Under such circumstances about all one can do is to pursue a method which shall at least call attention to the problems involved, and to indicate the main relations of the matters discussed to relevant topics. The difficulty is particularly great in the discussion of interest. Interest is in the closest relation to the emotional life, on one side; and, through its close felation, if not identity, with attention, to the intellectual life, on the other side. Any adequate explanation of it, therefore, would require the development of the complete psychology both of feeling and of knowledge, and of their relations to each other, and the discussion of their connection or lack of connection with volition.

Accordingly, I can only hope to bring out what seem to me to be the salient points, and if my results do not command agreement, help at least define the problem for further discussion.

While it would be sanguine to anticipate agreement upon any important educational doctrine, there is perhaps more hope of reaching working consensus by beginning with the educational side. If we can lay down some general principle regarding the place and function of interest in the school, we shall have a more or less sure basis from which to proceed to the psychological analysis of interest. At all events, we shall have limited the field and fixed the boundaries within which the psychological discussion may proceed. After this we shall proceed to the discussion of some of the chief attitudes assumed toward the problem of interest in historic and current investigations. Finally,

we may return with the results reached by this psychological and critical consideration to the educational matter with more definite emphasis upon the question of moral training.

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At first sight the hope of gaining a working consensus regarding interest on the educational side seems futile. The first thing that strikes us is the profound contradiction in current educational ideas and standards regarding this matter of interest. On the one hand, we have the doctrine that interest is the keynote both of instruction and of moral training, that the essential problem of the teacher is to make the material presented so interesting that it shall command and retain attention. On the other hand, we have the assertion that the putting forth of effort from within is alone truly educative; that to rely upon the principle of interest is to distract the child intellectually and to weaken him morally.

In this educational lawsuit of interest versus effort let us consider the respective briefs of plaintiff and defendant. In behalf of interest it is claimed that it is the sole guarantee of attention; that, if we can secure interest in a given set of facts or ideas, we may be perfectly sure that the pupil will direct his energies toward mastering them; that, if we can secure interest in a certain moral train or line of conduct, we are equally safe in assuming that the child's activities are responding in that direction; that, if we have not secured interest, we have no safeguard as to what will be done in any given case. As a matter of fact, the doctrine of discipline has not succeeded. It is absurd to suppose that a child gets more intellectual or mental discipline when he goes at a matter unwillingly than when he goes at it with complete interest and out of the fullness of his heart. theory of effort simply says that unwilling attention (doing something which is disagreeable and because it is disagreeable) should take precedence over spontaneous attention.

Practically the theory of effort amounts to nothing. When a child feels that his work is a task, it is only under compulsion that he gives himself to it. At the least let-up of external pressure we find his attention at once directed to what interests him. The child brought up on the basis of the theory of effort simply acquires marvelous skill in appearing to be occupied with an uninteresting subject, while the

real heart and core of his energies are otherwise engaged. Indeed, the theory contradicts itself. It is psychologically impossible to call forth any activity without some interest. The theory of effort simply substitutes one interest for another. It substitutes the impure interest of fear of the teacher or hope of future reward for pure interest in the material presented. The type of character induced is that illustrated by Emerson at the beginning of his essay on Compensation, where he holds up the current doctrine of compensation as virtually implying that, if you only sacrifice yourself enough now, you will be permitted to indulge yourself a great deal more in the future; or, if you are only good now (goodness consisting in attention to what is uninteresting) you will have, at some future time, a great many more pleasing interests—that is, may then be bad.

While the theory of effort is always holding up to us a strong, regorous character as the outcome of its method of education, practically we do not get this character. We get either the narrow, bigoted man who is obstinate and irresponsible save in the line of his own preconceived aims and beliefs; or else we get a character dull, mechanical, unalert, because the vital juice of the principle of spontaneous interest has been squeezed out of it.

We may now hear the defendant's case. Life, says the other theory, is full of things not interesting, but which have to be faced none the less. Demands are continually made, situations have to be dealt with, which present no features of interest. Unless the indiadual has had previous training in devoting himself to uninteresting work, unless habits have been formed of attending to matters simply because they must be attended to, irrespective of the personal satisfacuon gotten out of them, character will either break down, or avoid the save, when confronted with the more serious matters of life. Life is too serious to be degraded to a merely pleasant affair, or reduced to the continual satisfaction of personal interests. The concerns of future ide, therefore, imperatively demand such continual exercise of effort in the performance of tasks as to form the habit of recognizing the real wors of life. Anything else eats out the fiber of character and reduces the person to a wishy washy, colorless being; or else to a state of moral dependence, with over-reliance upon others and with conthreal demand for amusement and distraction.

Apart from the question of the future, continually to appeal even in childhood days to the principle of interest is eternally to excite,

that is, distract the child. Continuity of activity is destroyed. Everything is made play, amusement. This means over-stimulation; it means dissipation of energy. Will is never called into action at all. The reliance is upon external attractions and amusements. Everything is sugar-coated for the child, and he soon learns to turn from everything which is not artificially surrounded with diverting circumstances. The spoiled child who does only what he likes is the inevitable outcome of the theory of interest in education.

The theory is intellectually as well as morally harmful. Attention is never directed to the essential and important facts. It is directed simply to the wrappings of attraction with which the facts are surrounded. If a fact is repulsive or uninteresting, it has to be faced in its own naked character sooner or later. Putting a fringe of fictitious interest around it does not bring the child any nearer to it than he was at the outset. The fact that two and two make four is a naked fact which has to be mastered in and of itself. The child gets no greater hold upon the fact by having attached to it amusing stories of birds or dandelions than he would if the simple naked fact were presented to him. It is self-deception to suppose that the child is being interested in the numerical relation. His attention is going out to and taking in only the amusing images associated with this relation. The theory thus defeats its own end. It would be more direct and straightforward to recognize at the outset that certain facts have to be learned which have little or no interest, and that the only way to deal with these facts is through the power of effort, the internal power of putting forth activity wholly independent of any external inducement. Moreover, in this way the discipline, the habit of responding to serious matters, is formed which is necessary to equip the child for the life that lies

I have attempted to set forth the respective claims of each side as we find them, not only in current discussions, but in the old controversy, as old as Plato and Aristotle. A little reflection will convince one that the strong point in each argument is not so much what it says in its own behalf as in its attacks on the weak places of the opposite theory. Each theory is strong in its negations rather than in its position. It is a common, though somewhat surprising, fact that there is generally a common principle unconsciously assumed at the basis of two theories which to all outward appearances are the extreme opposites of each other. Such a common

principle is presupposed by the theories of effort and interest in the one-sided forms in which they have already been stated.

This identical assumption is the externality of the object or idea to be mastered, the end to be reached, the act to be performed, to the self. It is because the object or end is assumed to be outside self that it has to be made interesting, that it has to be surrounded with artificial stimuli and with fictitious inducements to attention. It is equally because the object lies outside the sphere of self that the sheer power of "will," the putting forth of effort without interest, has to be appealed to. The genuine principle of interest is the principle of the recognized identity of the fact or proposed line of action with the self; that it lies in the direction of the agent's own growth, and is, therefore, imperiously demanded, if the agent is to be himself. Let this condition of identification once be secured, and we neither have to appeal to sheer itrength of will, nor do we have to occupy ourselves with making things interesting to the child.

The theory of effort, as already stated, means a virtual division of attention and the corresponding disintegration of character, intellectubilities ally and morally. The great fallacy of the so-called effort theory is that it identifies the exercise and training of will with certain external activities and certain external results. It is supposed that, because a child is occupied at some outward task and because he succeeds in exhibiting the required product, that he is really putting forth will, and that definite intellectual and moral habits are in process of formation. But, as a matter of fact, the moral exercise of the will is not found in the external assumption of any posture, and the formation of moral habit cannot be identified with the ability to show up results at the demand of another. The exercise of the will is manifest in the direction of attention, and depends upon the spirit, the motive, the disposition in which work is carried on.

A child may be externally entirely occupied with mastering the multiplication table, and be able to reproduce that table when asked to do to by his teacher. The teacher may congratulate himself that the child has been so exercising his will power as to be forming right intellectual and moral habits. Not so, unless moral habit be identified with this ability to show certain results when required. The question of moral training has not been touched until we know what the child has been internally occupied with, what the predominating direction of his attention, his feelings, his disposition has been while engaged upon this task.

If the task has appealed to him merely as a task, it is as certain, psychologically, as the law of action and reaction is, physically, that the child is simply engaged in acquiring the habit of divided attention; that he is getting the ability to direct eye and ear, lips and mouth, to what is present before him in such a way as to impress those things upon his memory, while at the same time getting his mental imagery free to work upon matters of real interest to him.

No account of the actual moral training secured is adequate unless it recognizes this division of attention into which the child is being educated, and faces the question of what the moral worth of such a division may be. External mechanical attention to a task conceived as a task is the inevitable correlate of an internal random mind-wandering along the lines of the pleasurable.

The spontaneous power of the child, his demand for realization of his own impulses, cannot by any possibility be suppressed. If the external conditions are such that the child cannot put his spontaneous activity into the work to be done, if he finds that he cannot express himself in that, he learns in a most miraculous way the exact amount of attention that has to be given to this external material to satisfy the requirements of the teacher, while saving up the rest of his mental powers for following out lines of imagery that appeal to him. I do not say that there is absolutely no moral training involved in forming these habits of external attention, but I do say that there is a question of moral import involved in the formation of the habits of internal inattention.

While we are congratulating ourselves upon the well-disciplined habits which the pupil is acquiring, judged by his ability to reproduce a lesson when called upon, we forget to commiserate ourselves because the deeper intellectual and moral nature of the child has secured absolutely no discipline at all, but has been left to follow its own caprices, the disordered suggestions of the moment, or of past experience. I do not see how anyone can deny that the training of this internal imagery is at least equally important with the development of certain outward habits of action. For myself, when it comes to the mere moral question and not a question of practical convenience, I think it is infinitely more important. Nor do I see how anyone at all familiar with the great mass of existing school work can deny that the greater part of the pupils are gradually forming habits of divided attention. If the teacher is skillful and wide-awake, if she is what is termed a good disciplinarian, the child will indeed learn to keep his senses intent in certain ways, but he will

also learn to direct the fruitful imagery, which constitutes the value of what is before his senses, in totally other directions. It would not be wholly palatable to have to face the actual psychological condition of the majority of the pupils that leave our schools. We should find this division of attention and the resulting disintegration so great that we might cease teaching in sheer disgust. None the less, it is well for us to recognize that this state of things exists, and that it is the inevitable outcome of those conditions which require the simulation of attention without requiring its essence.

The principle of making objects and ideas interesting implies the same divorce between object and self as does the theory of "effort." Making Things When things have to be made interesting, it is because interest itself is wanting. Moreover, the phrase is a misnomer. The thing, the object, is no more interesting than it was before. The appeal is simply made to the child's love of pleasure. He is excited in a given direction, with the hope that somehow or other during this excitation he will assimilate something otherwise repulsive. There are two types of pleasure. One is the accompaniment of activity. It is found wherever there is self-expression. It is simply the internal realization of the outgoing energy. This sort of pleasure is always absorbed in the activity itself. It has no separate existence in consciousness. This is the type of pleasure found in legitimate interest. its stimulus is found in the needs of the organism. The other sort of pleasure arises from contact. It marks receptivity. Its stimuli are external. We take interest; we get pleasure. The type of pleasure which arises from external stimulation is isolated. It exists by itself in consciousness as a pleasure, not as the pleasure of activity.

When objects are made interesting, it is this latter type of pleasure that comes into play. Advantage is taken of the fact that a certain amount of excitation of any organ is pleasurable. The pleasure arising amployed to cover the gap between self and some fact not in itself arouning interest.

The result here also is division of energies. In the case of disagreeable effort the division is simultaneous. In this case it is successive. Instead of having a mechanical, external activity and a random internal activity at the same time, there is oscillation of excitement and apathy. The child alternates between periods of overstimulation and of inertness. It is a condition realized in some so-called kindergartens. Moreover, this

excitation of any particular organ, as eye or ear, by itself, creates an abiding demand for such stimulation. It is as possible to create an appetite on the part of the eye or the ear for pleasurable stimulation as it is on the part of the taste. Some kindergarten children are as dependent upon the recurrent presence of bright colors or agreeable sounds as the drunkard is upon his dram. It is this which accounts for the distraction and dissipation of energy so characteristic of such children, and for their dependence upon external suggestion.

Before attempting a more specific psychological analysis, the discussion up to this point may be summarized as follows: Genuine interest in education is the accompaniment of the identification, through action, of the self with some object or idea, because of the necessity of that object or idea for the maintenance of self-expression. Effort, in the sense in which it may be opposed to interest, implies a separation between the self and the fact to be mastered or task to be performed, and sets up an habitual division of activities. Externally, we have mechanical habits with no psychical end or value. Internally, we have random energy or mind-wandering, a sequence of ideas with no end at all, because not brought to a focus in action. Interest, in the sense in which it is opposed to effort, means simply an excitation of the sense organ to give pleasure, resulting in strain on one side and listlessness on the other.

But when we recognize there are certain powers within the child urgent for development, needing to be acted upon, in order to secure their own due efficiency and discipline, we have a firm basis upon which to build. Effort arises normally in the attempt to give full operation, and thus growth and completion, to these powers. Adequately to act upon these impulses involves seriousness, absorption, definiteness of purpose, and results in formation of steadiness and persistent habit in the service of worthy ends. But this effort never degenerates into drudgery, or mere strain of dead lift, because interest abides—the self is concerned throughout.

II.

We come now to our second main topic, the psychology of interest. It should be obvious, from the preceding educational discussion, that the Psychology of Interest. the points upon which we particularly need enlightenment are its relation to desire and pleasure on one side, to ideas and effort on the other.

I begin with a brief descriptive account of interest. Interest is arst active, projective, or propulsive. We take interest. To be interested in any matter is to be actively concerned with it. The mere feeling regarding a subject may be static or inert, but interest is dynamic. Second, it is objective. We say a man has many interests to care for or look after. We talk about the range of a man's interests, his business interests, local interests, etc. We identify interests with concerns or affairs. Interest does not end simply in itself, as bare feelings may, but always has some object, end, or aim to which it attaches itself. Third, interest is subjective; it signifies an internativealization, or feeling, of worth. It has its emotional as well as its active and objective sides. Wherever there is interest there is response in the way of feeling.

These are the various meanings in which common sense employs the term interest. The root idea of the term seems to be that of being engaged, engrossed, or entirely taken up with some activity because of its recognized worth. The etymology of the term inter-esse, "to be between," points in the same direction. Interest marks the annihilation of the distance between the person and the materials and results of his action; it is the instrument which effects their organic union."

We have now to deal more in detail with each of the three phases mentioned:

The active or propulsive phase of interest takes us back to the consideration of impulse and the spontaneous urgencies or tendencies of activity. There is no such thing as absolutely diffuse, impartial impulse. Impulse is always differentiated along some more or less specific channel. Impulse has between two bundles of discharge. The old puzzle about the ass between two bundles of hay is only too familiar, but the recognition of its fundamental fallacy is not so common. If the self were purely pasave or purely indifferent, waiting upon stimulation from without, then

'It is true that the term interest is also used in a definitely disparaging sense. We speak of interest as opposed to principle, of self-interest as a motive to action which regards only one's personal advantage; but these are neither the only nor the controlling senses in which the term is used. It may fairly be questioned whether this is anything but a narrowing or degrading of the legitimate sense of the term. However that may be, it appears to me certain that much of the controversy regarding the moral use of interest arises because one party is using the term in the larger, objective sense of recognized value or engrossing activity, while the other is using it sequivalent to selfish motive.

the self illustrated in this supposed example would remain forever helpless, starving to death, because of its equipoise between two sources of food. The error is in the supposition of this balanced internal condition. The self is always already doing something, intent on something urgent. And this ongoing activity always gives it a bent in one direction rather than another. The ass, in other words, is always already moving toward one bundle rather than the other. No amount of physical cross-eyedness could induce such psychical cross-eyedness that the animal would be in a condition of equal stimulation from both sides.

In this primitive condition of spontaneous, impulsive activity we have the basis for natural interest. Interest is no more passively waiting around to be excited from the outside than is impulse. In the selective or preferential quality of impulse we have the basis of the fact that at any given time, if we are psychically awake at all, we are always interested in one direction rather than another. The condition of total lack of interest, or of absolutely impartially distributed interest, is as mythical as the story of the ass in scholastic ethics.

An equally great fallacy is the oft-made assumption of some chasm between impulse and the self. Impulse is spoken of as if it were a force swaying the self in this direction or that; as if the self were an indifferent, passive something waiting to be moved by the pressure of impulse; in reality, impulse is simply the impetus or outgoing of the self in one direction or other. This point is mentioned now because the connection of impulse and interest is so close that any assumption at this point of impulse as external to self is sure to manifest itself later on in the assumption that interest is of the nature of an external inducement or attraction to self, instead of being an absorption of the activities of the self in the object that allows these activities to function.

The Objective side of interest. Every interest, as already said, attaches itself to an object. The artist is interested in his brushes, in his colors, in his technique. The business man is interested in the play of supply and demand, in the movement of markets, etc. Take whatever instance of interest we choose, and we shall find that, if we cut out the factor of the object about which interest clusters, interest itself disappears, relapsing into mere subjective feeling.

Error begins in supposing the object already there, and then call-

ing the activity into being. Canvas, brushes, and paints interest the artist, for example, only because they help him find his existing artistic capacity. There is nothing in a wheel and a piece of string to arouse a child's activity save as they stimulate some instinct or impulse already active, and supply it with the means of its execution. The number twelve is uninteresting when it is a bare, external fact; it has interest (just as has the top or wheelbarrow or toy locomotive) when it presents itself as an instrument of carrying into effect some dawning energy or desire—making a box, measuring one's height, etc. And in its difference of degree exactly the same principle holds of the most technical items of scientific or historic knowledge—whatever furthers one, helps mental movement, is of necessary and intrinsic interest.

3. We now come to the emotional phase. Value is not only objective, but subjective. That is, there is not only the thing which is projected as valuable or worth while, but there is also the feeling of its worth. It is, of course, impossible to define feeling. We can only say that it is the purely important, individual consciousness of worth, and recognize that wherever we have interest there we have internal realization of value.

The gist of the psychology of interest may, accordingly, be stated as follows: An interest is primarily a form of self-expressive activity—that is, of growth through acting upon nascent tendencies. If we examine this activity on the side of the content of expression, of what is done, we get its objective features, the ideas, objects, etc., to which the interest is attached, about which it clusters. If we take into account that it is self-expression, that self finds itself, is reflected back to itself, in this content, we get its emotional or feeling side. Any account of genuine interest must, therefore, grasp it as outgoing activity holding within its grasp an intellectual content, and reflecting itself in felt value.

There are cases where self-expression is direct and immediate. It puts itself forth with no thought of anything beyond. The present activity is the only ultimate in consciousness. It satisfies in and of itself. The end is the present activity, work or Brude and so there is no gap in space nor time between means and end. All play is of this immediate character. All purely aesthetic appreciation approximates this type. The existing experience holds us for its own sake, and we do not demand of it that it takes us into something beyond itself. With the child and his ball,

the amateur and the hearing of a symphony, the immediate engrosses. Its value is there, and is there in what is directly present.

We may, if we choose, say that the interest is in the object present to the senses, but we must beware how we interpret this saying. The object has no conscious existence, at the time, save in the activity. The ball to the child is his game, his game is his ball. The music has no existence save in the rapt hearing of the music—so long as the interest is immediate or æsthetic. It is frequently said to be the object which attracts attention, which calls forth interest to itself by its own inherent qualities. But this is a psychological impossibility. The bright color, the sweet sound, that interest the child are themselves phases of his organic activity. To say the child attends to the color does not mean that he gives himself up to an external object, but rather that he continues the activity which results in the presence of the color. His own activity so engrosses him that he endeavors to maintain it.

On the other hand, we have cases of indirect, transferred, or, technically, mediated interest. That is, things indifferent or even repulsive in themselves often become of interest because of their assuming relationships and connections of which we are previously unaware. Many a student, of so-called practical make-up, has found mathematical theory, once repellant, lit up by great attractiveness when he studied some form of engineering in which this theory was a necessary tool. The musical score and the technique of fingering, in which the child can find no interest when it is presented as an end in itself, when it is isolated, becomes fascinating when the child realizes its place and bearings in helping him give better and fuller utterance to his love of song. It is all a question of relationship, whether it appeals or fails to appeal; and while the little child takes only a near view of things, as he grows he becomes capable of extending his range, and seeing an act, or a thing, or a fact, not by itself, but in its value as part of a larger whole. If this whole belongs to him, if it is a mode of his own movement, then the particular gains interest too.

Here, and here only, we have the reality of the idea of "making things interesting." I know of no more demoralizing doctrine—when taken literally—than the assertion of some of the opponents of interest that after subject-matter has been selected, then the teacher should make it interesting. This combines in itself two thoroughgoing errors. On one side, it makes the selection of subject-matter a matter quite inde-

pendent of the question of interest—and thus of the child's own native urgencies and needs; and, further, it reduces method in teaching to more or less external and artificial devices for dressing up the unrelated materials, so that it will get some hold upon attention. In reality, the principle of "making things interesting" means that subjects shall be selected in relation to the child's present experience, powers, and needs; and that (in case he does not perceive or appreciate this relevancy) the teacher shall present the new material in such a way as to enable the child to appreciate its bearings, its relationships, its necessity for him, it is this bringing of the child to consciousness in new material which constitutes the reality of what is so often perverted, both by friend and foe, in the idea of "making things interesting."

In other words, the problem is one of the degree of intrinsic connection furnished as a motive for attention. The teacher who tells the child he will be kept after school if he doesn't recite his geography lesson better' is appealing to the psychology of mediate interest. The former English method of rapping knuckles for false Latin quantities is one way of arousing interest in the intricacies of Latin. To offer a child a bribe, or a promise of teacher's affection, or promotion to the next grade, or ability to make money, or to take a position in society, are other modes. They are cases of transferred interest. But the criterion of judging them lies just here: How far is one interest externally attached to another, or substituted for another? How far does the new appeal, the new motive, serve to interpret, to bring out, to relate the material otherwise without interest? It is a question, again, of inter-esse, of interaction. The problem may be stated as one of the relations of means and end. Anything indifferent or repellant becomes of interest when seen as a means to an end already related to self, or as an end which will allow means already at command to secure further movement and outlet. But, in normal growth, the interest in one is not simply externally tied on to the other; in suffuses, satutales, and thus transforms it. It interprets or revalues it - gives it a new significance in consciousness. The man who has a wife and tun.ly has thereby a new motive for his daily work—he sees a new bearing in it, and takes into it a steadiness and enthusiasin pre-

[&]quot;I have it argued in all servousness that a child kept after school to study has often get an interest in arithmetic or grammar which be didn't have before, as if this privet the efficacy of "discipline" vs. interest. Of course, the reality is that the greater leasure, the episormanty for individual explanation afforded, served to bring the material into its proper relations in the child's mind - be "got a bold" of it.

viously lacking. But if he does his day's work as a thing intrinsically disagreeable, as drudgery, simply for the sake of the final wage-reward, the case is quite different. Means and end remain remote; they do not permeate one another. The person is no more really interested in his work than he was before; it, in itself, is a hard-ship to be escaped from. Hence he cannot give full attention to it; he cannot put himself unreservedly into it. But to the other man every stroke of work may mean literally his wife and baby. Externally, physically, they are remote; mentally, in consciousness, they are one; they have the same value. But in drudgery means and end remain as separate in consciousness as they are in space and time. What is true of this is true of every attempt in teaching to "create interest" by appeal to external motives.

At the opposite scale, take a case of artistic construction. The sculptor has his end, his ideal, in view. To realize that end he must go through a series of intervening steps which are not, on the face of it, equivalent to the end. He must model and mold and chisel in a series of particular acts, no one of which is the beautiful form he has in mind, and every one of which represents the putting forth of personal energy on his own part. But because these are to him necessary means for the end, the ideal, the finished form is completely transferred over into these special acts. Each molding of the clay, each stroke of the chisel, is for him at the time the whole end in process of realization. Whatever interest or value attaches to the end attaches to each of these steps. He is as much absorbed in one as in the other. Any failure in this complete identification means an inartistic product, means that he is not really interested in his ideal. A genuine interest in the ideal indicates of necessity an equal interest in all the conditions of its expression.

We are now in position to deal with the question of the relation of interest to desire and to effort. Desire and effort in their legitimate meaning are, both of them, phases of mediated interest.

They are correlatives, not opposites. Both effort and desire exist only when the end is somewhat remote. When energy is put forth purely for its own sake, there is no question of effort and equally no question of desire. Effort and desire both imply a state of tension. There is a certain amount of opposition existing between the ideal in view and the present actual state of things. We call it effort when we are thinking of the necessity of a

decided transformation of the actual state of things in order to make it conform to the ideal—when we are thinking of the process from the side of the idea and interested in the question how to get it realized. We call it desire when we think of the tendency of the existing energies to push themselves forward so as to secure this transformation, or change the idea into a fact—when we think of the process from the side of the means at hand. But in either case, obstacles delaying us, and the continued persistence of activity against them, are implied. The only sure evidence of desire, as against mere vague wishing, is effort, and desire is aroused only when the exercise of effort is required.

In discussing the condition of mediate interest we may emphasize either the end in view, the idea, or we may start with the consideration of the present means, the active side urgent for expression. The former is the intellectual side, the latter the emotional. The tendency of the end to realize itself through the process of mediation, overcoming resistance, is effort. The tendency of the present powers to continue a struggle for complete expresssion in an end remote in time is desire.

We often speak of appetite as blind and lawless. We conceive it as insisting upon its own satisfaction, irrespective of circumstances or of the good to the self. This means that the appetite is only felt; it is not known. It is not considered from the standpoint of its bearings or relationships. It is not translated over into terms of its results. Consequently it is not made intelligent. It is not rationalized. As a result energy is wasted. In any strong appetite there is an immense amount of power, physical and psychical, surred up; but where the agent does not anticipate the ends corresponding to this power, it is undirected. The energy expends itself in chance channels or according to some accidental stimulus. The organism is exhausted, and nothing positive or objective is accomplished. The disturbance or agitation is out of proportion to any ends reached. All there is to show for such a vast excitation of energy is the momentary satisfaction felt in its stimulation and expenditure.

Even as regards this blind appetite, there is, however, a decided difference of type between the lower animals and man. In the animals, while the appetite is not conscious of its own end, it none the less seeks that end by a sort of harmony preestablished in the animal structure. Fear serves the animal as a stimulus to flight or to seeking cover. Anger serves it for purposes of attack and defense. It is a very unusual

occurrence when the feeling gets the better of the animal and causes it to waste its powers uselessly. But of the blind feelings in the human being it is to be said that most of them require adjustment before they are of any regular permanent service. There is no doubt that fear or anger may be rendered useful to the man as they are to the animal. But in the former case they have to be trained to this use; in the latter they originally possess it. The ultimate function of anger is undoubtedly to do away with obstacles hindering the process of realization, but in a child the exhibition of anger is almost sure to leave the object, the obstacle, untouched and to exhaust the child. The blind feeling needs to be rationalized. The agent has to become conscious of the end or object and control his aroused powers by conscious reference to it.

For the process of self-expression to be effective and mechanical, there must, in other words, be a consciousness of both end and means. Whenever there is difficulty in effecting adjustment of means and ends, the agent is thrown into a condition of emotion. Whenever we have on one side the idea corresponding to some end or object, and whenever we have on the other side a stirring up of the active impulses and habits, together with a tendency of the latter to focus themselves at once upon the former, there we have a disturbance or agitation, known on its psychical side as emotion. It is a commonplace that, as fast as habit gets definitely formed in relation to its own special end, the feeling element drops out. But now let the usual end to which the habit is adapted be taken away and a sudden demand be made for the old habit to become a means toward a new end, and emotional stress at once becomes urgent. The active side is all stirred up, but neither discharges itself at once, without any end, nor yet directs itself toward any accustomed end. The result is tension between habit and aim, between impulse and idea, between means and end. This tension is the essential feature of emotion.

It is obvious from this account that the function of emotion is to secure a sufficient arousing of energy in critical periods of the life of the agent. When the end is new or unusual and there is great difficulty in attending to it, the natural tendency would be to let it go or turn away from it. But the very newness of the end often represents the importance of the demand that is being made. To neglect the end would be a serious, if not fatal, matter for the agent. The very difficulty in effecting the adjustment sends out successive waves of stimuli, which call into play more

impulses and habits, thus reinforcing the powers, resources, at the agent's command. The function of emotion is thus to brace or reinforce the agent in coping with the novel element in unexpected and immediate situations.

The normal moral outcome is found in a balance between the excitation and the ideal. If the former is too weak or diffused, the agent lacks in motor power. If it is relatively too strong, the agent is not able to handle the powers which have been stirred up. He is more or less beside himself. He is carried away by the extent of his own agitation. He relapses, in other words, into the phase of blind feeling.

Desire cannot be identified with mere impulse or with blind feeling.

Desire differs from the appetite of the animal in that it is always con-

scious, at least dimly, of its own end. When the agent is in the condition known as desire, he is conscious of some object ahead of him, and the consciousness of this object serves to reinforce his active tendencies. The thought of the desired object serves, in a word, to stimulate the means necessary to its attainment. While desire is thus not a purely impulsive state, neither, of course, is it a purely intellectual one. The object may be present in consciousness, but it is simply contemplated as an object; if it does not serve as stimulus to activity, it occupies a purely æsthetic or theoretic place. At most, it will arouse only a pious wish or a vague sentimental longing, not an active desire.

The true moral function of desire is thus identical with that of emotion, of which, indeed, it is only one special phase. Its place in the moral life is to arouse energy, to stimulate the means necessary to accomplish the realization of ends otherwise purely theoretic or æsthetic. Our desires in a given direction simply measure the hold which certain ends or ideas have upon us. They exhibit the force of character, the Drang in that direction. They test the sincerity of character. A produced end which does not awaken desire is a mere pretension. It indicates a growing division of character, a threatening hypocrisy.

The moral treatment of desire, like that of emotion, involves securing a balance. Desire tends continually to overdo itself. It marks energy stirred up to serve as means; but the energy once stirred up tends to express itself on its own account independently of the end. Desire is greedy, lends itself to over-hastiness, and unless watched makes the agent over-hasty. It runs away with him. It is not enough that the contemplation of the end stir up the impulses and habits; the con-

sciousness of the end must also abide, after they are excited, to direct the energy called into being.

We thus get a criterion for the normal position of pleasure in relation to desire. There can be no doubt that desire is always more or less pleasurable. It is pleasurable in so far as the end of self-expression is present in consciousness. For the end defines satisfaction, and any conception of it awakens, therefore, an image of satisfaction, which, so far as it goes, is itself pleasurable. The use of this pleasure is to give the end such a hold upon the agent that it may pass over from its ideal condition into one of actualization. Normal pleasure has a strictly instrumental place. It is due to the thought of the end on one side, and it contributes to the practical efficiency of the end on the other. In the case of self-indulgence the end is used simply to excite the pleasurable state of consciousness, and, having done this, is thereafter denied. Pleasure, instead of serving to hold the mind to the end, is now made itself the end.

What, it may be asked, is the connection of this with the question of interest? Precisely this: In the analysis of desire we are brought back exactly to the question of mediate interest. Normal desire is simply a case of properly mediated interest. The problem of attaining the proper balance between the impulses on one side and an ideal or end on the other is just the question of getting enough interest in the end to prevent a too sudden expenditure of the waste energy—to direct this excited energy so that it shall be tributary to realizing the end. Here the interest in the end is taken over into the means. Interest, in other words, marks the fact that the emotional force aroused is functioning. This is our definition of interest; it is impulse functioning with reference to an idea of self-expression.

Interest in the end indicates that desire is both caimed and steaded. Over-greedy desire, like over-anxious aversion, defeats itself. The youthful hunter is so anxious to kill his game, he is so stimulated by the thought of reaching his end, that he cannot control himself sufficiently to take steady aim. He shoots wild. The successful hunter is not the one who has lost interest in his end, in killing the game, but the one who is able to translate this interest completely over into the means necessary to accomplish his purpose. It is no longer the killing of the game that occupies his consciousness by itself, but the

thought of the steps he has to perform. The means, once more, have been identified with the end; the desire has become mediate interest. The ideal dies as bare ideal, to live again in instrumental powers.

So far we have been discussing the process of mediated self-expression from the standpoint of the means. We have now to consider the same process, throwing the emphasis of intellectual analysis on the side of the end. Because of the length of the foregoing discussion we may here briefly consider the end or ideal, on the sides, respectively, of its origin and its function.

First, its origin. The ideal is normally a projection of the active powers. It is not generated in a vacuum nor introduced into the mind from outside impulses and habits actually striving for expression. It is simply these active powers getting off and looking at themselves to see what they are like; to see what they are upon the whole, permanently, in their final bearings, and not simply as they are at the moment and in their relative isolation. The ideal, in other words, is the self-consciousness of the impulse. It is its self-interpretation; its value in terms of possible realization.

Second, hence its function. If the ideal had its genesis independent of the active powers, it is impossible to see how it could ever get to work. The psychical machinery by which it should cease to be barely an ideal, and become an actuality, would be wanting. But just because the ideal is normally the projection of the active powers into intellectual terms, the ideal inevitably possesses active quality. This dynamic factor is present to stay. Its appearance as motive is not anything different in kind from its appearance as ideal. Motivation is just the realization of the active value originally attaching to it.

In other words, when the ideal has the function of motive (a power inducing to activity), we have precisely the same fact, viewed from the standpoint of the end, that we have just now considered as the passing over of desire into mediate interest when viewing it from the side of the means. So long as the ideal does not become a motive, it indicates that the ideal itself is not yet definitely formed. There is conflict of ideals. The agent has two possible ends before him, one corresponding to one set of his active powers, and another to another set of impulses or habits. Thought, reflection, is not focused, accordingly, in any single direction. The self has not yet found itself. It does not know what it really wants. It is in process of tentative self-expression, first trying on one self and then another to

see how they fit. The attainment of a single purpose or the defining of one final ideal indicates the self has found its unity of expression. At this exact point the ideal, having no longer any opposition to hold it back, begins to show itself in overt action. The ideal has become a motive. The interest in the end is now taken over into the impulses and habits, and they become the present ends. Motive is the interest in the ideal mediated into impulse and habit.

Normal effort is precisely this self-realizing tendency of the ideal—
its struggle to pass over into motive. The empty or formal ideal is
the end which is not suggested by, or does not grow out
Mosning of Mormal Effort.

of, the agent's active powers. Lacking any dynamic
qualities, it does not assert itself; its does not become a
motor, a motive. But whenever the ideal is really a projection or translation of self-expression, it must strive to assert itself. It must persist
through obstacles, and endeavor to transform obstacles into means of
its own realization. The degree of its persistency simply marks the
extent to which it is in reality, and not simply in name, a true ideal or
conceived form of self-expression.

The matter of good intentions or "meaning well" affords a good illustration of this principle. When a person who has outwardly failed in his duty offers his good intentions as a justification or palliation of conduct, what determines whether or no his excuse shall be accepted? Is it not precisely whether he can or not show effort on the part of his intention, his ideal, to realize itself, and can show obstacles intervening from without which have prevented its expression up to the point of overt realization? If he cannot show overwhelming interference from without, we have a right to conclude either that the agent is attempting to deceive us or else is self-deceived—that his so-called good intention was in reality but a vague sentimental wish or else a second-handed reference to some conventional ideal which had no real hold upon him. We always use the persistence of an end against obstacles as a test of its vitality, its genuineness.

On the other hand, effort, in the sense of strain because of lack in interest, is evidence of the abnormal use of effort. The necessity of effort in this sense indicates that the end nominally held up is not recognized as a form of self-expression—that it is external to the self and hence fails in interest. The conscious strring up of effort marks simply the unreal strain necessarily involved in any attempt to reach an end which is not part and parcel of the self's

own process. The strain is always artificial; it requires external stimulation of some sort or other to keep it going, and always leads to exhaustion. Not only does effort in its true sense play no part in moral training, but it plays a distinctly immoral part. The externality of the end, as witnessed in its failure to arouse the active impulses and to persist toward its own realization, makes it impossible that any strain to attain this end should have any other than a relatively immoral motive. Only selfish fear, the dread of some external power, or else purely mechanical habit, or else the hope of some external reward, some more or less subtle form of bribery, can be really a motive in any such instance.

We thus see how the theories of pleasure as a motive and artificial effort as a motive have the same practical outcome. The theory of strain always involves some reference to either pleasure or pain as the real controlling motive. And the theory of pleasure, because of its lack of an intrinsic end which holds and directs the powers, has continually to fall back upon some external inducement to excite the flagging powers. It is a commonplace in morals that no one puts forth more effort with less avail than the habitual seeker after pleasure.

The outcome of our psychological analysis is thus identical with the results reached by consideration of the practical educational side. There we found that the appeal to making things interesting, to stirring up pleasure in things not of themselves interesting, leads as a matter of common experience to alternation of overstimulation and duil apathy. Here we find that the desire for pleasure as an end leads necessarily to the stirring up of energies uselessly on one side, and the undirected, wasteful expenditure of energies on the other.

On the educational side we saw that the appeal to the sheer force of "will," so-called, apart from any interest in the object, means the formation of habits of divided attention—the mechanical doing of certain things in a purely external way on the one side, and the riotous, uncontrolled play of imagery on the other. On the psychological side we find that interest in an end or object simply means that the self is finding its own movement or outlet in a certain direction, and that consequently there is a motive for effort, for putting forth energy, in realizing the desirable end.

On the educational side we were led to assume that normal interest and effort are identical with the process of self-expression. We have

now through the process of mediated self-expression secured a fairly adequate psychological justification for that practical postulate of education.

III.

Current discussions as to the relation of interest to moral training have centered largely about the relative merits of the Kantian and Herbartian theories of desire and will. So far as I can see, as between the two theories, it is a case of six of one and half a dozen of the other. Judged by the outcome of the previous discussion, neither theory has an

adequate conception either of interest or of moral volition.

The criticisms of the Kantian theory have been so thoroughly worked out by Hegel and Schleiermacher, in Germany, and recently by Bradley, Green, and Caird, in England, that we need here give only a very brief summary. Kant holds that the sole end or object of desire is pleasure; that desire, in other words, is always self-seeking in the bad sense of that term. The end set up by desire must, therefore, be excluded from any share in moral motivation. The agent must take the moral law, the end laid down by reason, not only as his end, but also as his motive. But all special ends are excluded from the end of reason, because they are empirical and not adequate to the necessity and universality of reason. Reason thus becomes purely formal. It is empty, having no content.

It should hardly be necessary to dwell upon the inadequacy of a theory which excludes all specific concrete ends from forming the content of the moral motive. Such a theory would have, as its practical outcome, only the deification of mere good intentions on one side, or else the setting up of hard and fixed rules on the other. The inefficiency of such a theory for the purpose of the educator also goes without saying. It is not the work of the educator of children to fix their attention upon abstract morality or to induce them to act with the formal law of duty as their controlling motive. It is rather his business to get the children to realize what the general abstract demands of morality require in very special and concrete instances, and to give them such an interest in these specific moral ends as will endow them with motor power. Kant's theory absolutely fails to supply any guidance as to method in this respect. The teacher who attempted to work by it would inevitably, so far as he influenced pupils at all, make them into

either sentimentalists or prigs. He would make them self-conscious in the bad sense of that term—concerned, that is to say, with their own attitude toward morality rather than with conduct itself.

One or two points in Kant's psychology are, however, perhaps worth remark. On the one hand we have his assumption that the whole impulsive, appetitive desiring nature of man works toward moral evil, is selfish. The dualism between sense and reason, which is the essence of his theory of knowledge, reappears also in his critique of will. The self is split in two. It has one phase which is only particular, and another phase which is merely universal. All this is assumption without justification from either the biological, or psychological, or the logical point of view. Biologically, impulse and appetite represent, not a striving for pleasure, but a striving to maintain and further the life process. Psychologically, impulse is always a means, an instrument, for realizing an end. Pleasure arrives, not as its animating and intended aim, but as an accompaniment of the putting forth of activity. Logically, the particular has to be conceived as one specified mode of activity of an organic whole; the universal as the principle which organizes particulars into the unified whole.

Moreover, when we take the particular kind of interest which Kant does finally admit, its inadequacy to the needs of the educator is glaring. Reverence for the moral law is the one form of emotion which Kant admits. But this interest is of necessity a late one in the process of development. Observation, both of the race and of the individual, justifies this statement. Given a moral character already formed, an appeal to this interest undoubtedly has value—especially in critical periods of moral stress; for it may be questioned whether in the great mass of the acts even of the mature character it would be advisable to bring in distinct consciousness of moral law, rather than to trust to the value lying in the ends themselves. But the problem for the educator is not how to reach the formed character in which reverence for the moral law as such has any meaning. The problem for him is how to utilize present interests and special ends so that there may grow out of them in due time such a sense of law and of the claims of law as to hold and reinforce character in critical periods of temptation.

We find the Herbartian claiming the following things: First, interest is psychical activity. It is an inner animation of the self, a stirring up of the self. In the satisfaction of interest, pleasure is felt and men-

tal ease of operation is furthered. Second, it is attached to the object for its own sake, and not because of what the object may do in serving further ends. Genuine interest, according to the Herbartians, is always immediate; absorbed, that is, in the value of the object. It is involuntary — that is, precedes, and is independent of, the awakening of any desire. Mediate interest is what is usually termed an impure interest, attaching not to the object for its own sake, but for its usefulness in reaching more remote ends of pleasure or of success. Third, interest is the means by which certain ideas and certain connections between ideas can be so established and reinforced as to become practically influential in directing the child's conduct.

All this seems to me sound educational sense. Make allowance for the different use of the terms immediate and mediate interest, and it agrees substantially with the analysis already given. But when we go to the psychology of interest, we find an account which not only does not justify previous statements, but actually contradicts them.

According to this psychological view, interest is not psychical activity, but is a product of the actions and reactions of ideas. Interest is simply one case of feeling, and all the feeling depends upon the mechanism of ideas. In his desire to get rid of the "faculty" psychology, Herbart denies any original or primitive character to either impulse or feeling. Interest from this point of view is an outcome, a result only. It may be said to be the end of education, but it cannot possibly be a means, a motive. Instead of directing ideas, it is their passive reflex.

When some idea (Vorstellung) is crowded below, or down toward, the threshold of consciousness, it strains against the counteracting ideas. The idea, having no force per se, becomes a force through pressure, and through the resistance of self-preservation it exerts against such pressure. In this forward and backward striving of the ideas some ideas fuse; the new and the old join hands. This fusion (the essence of apperception) gives a certain pleasure, the sense of ease. Hence a peculiar kind of feeling, known as interest. The demand, not for any special Vorstellung, but for the repetition of the apperceptive process, for the repetition of this junction between new and old (because of its peculiar pleasure?), is interest. It is the need to occupy itself further with the same activity.

In other words, interest is attached in no sense to the content of the ideas, aiming at appreciating their intrinsic values, but depends wholly

on the formal interaction of the ideas; it accompanies the apperceptive process as such, independently of the particular set of ideas apperceived.

The weakness both of Herbartian psychology and pedagogy seems to me to lie just here—in giving the idea a sort of external existence, a ready-made character, an existence and a content not dependent upon previous individual activity. It abstracts the idea from impulses and the activity that results from them, just as does the Kantian theory. The Kantian ideas have the advantage on the side of scope, of comprehensiveness; the Herbartian Vorstellungen have it on the side of definiteness, of immediate availability. But both doctrines fail to recognize the genesis of the ideas, the conceived ends, out of concrete spontaneous action; and equally fail to recognize their function as being the guides and directors of the instinctive tendencies to action.

Herbartianism seems to me essentially a schoolmaster's psychology, not the psychology of a child. It is the natural expression of a nation laying great emphasis upon authority and upon the formation of individual character in distinct and recognized subordination to the ethical demands made in war and in civil administration by that authority. It is not the psychology of a nation which professes to believe that every individual has within him the principle of authority, and that order means coördination, not subordination. It would be folly not to recognize to the full all the Herbartians say about the moral importance of forming certain ideas and certain relationships among ideas, and the extent to which character may be formed or disintegrated through the right and wrong use of the intellectual side of instruction in both its form and content. But just as our psychology shows us that ideas arise as the definition of activity, and serve to direct that activity in new expressions, so we need a pedagogy which shall lay nore emphasis upon securing in the school the conditions of direct experience and the gradual evolution of ideas in and through the constructive activities; for it is the extent in which any idea is a projection of natural tendencies that measures its weight, its motor power, its interest.

We are not bound up to the one-sidedness of either Kant or Herbert, on the historical, any more than on the psychological, side. We may go back to Plato and Aristotle, with their assertion that "the particular training in respect to pleasure and pain which leads one to take pleasure in, to love, what demands love, and to feel pain in, to hate,

what deserves hate, is education." Or we may go ahead to Hegel, who could say that the "actual rationality of heart and will can only be at home in the universality of intellect," and yet write as follows: "The impulses and inclinations are sometimes contrasted, quite to their disadvantage, with the morality of duty for duty's sake. But impulse and passion are the very life blood of all action; they are necessary if the individual is to be really concerned in his end and its execution. The aim, the ideal, with which 'morality' has to do is, as such, bare content, the universal—an inactive thing. It finds its actualizing in the agent, finds it only when the aim is immanent in the agent, is his interest, and—should it claim to engross his whole efficient subjectivity—his passion."

IV.

It only remains briefly to summarize from the educational side the whole discussion.

INTEREST IN RELATION TO THE TEACHER AND TO THE CHILD.

We are often told that the doctrine of interest in education means that the undeveloped, crude, and capricious capacity and insight of the child are substituted for the matured, trained, and wider outlook and experience of the adult. Our previous discussion should enable us to set this matter to rights. There are existing natural interests on the part of the child, due in part to the stage of development at which he is arrived, in part to his habits previously formed, and to his environment. These are relatively crude, uncertain, and transitory. Yet they are all there is, so to speak, to the child; they are all the teacher has to appeal to; they are the starting points, the initiatives, the working machinery. Does it follow that the teacher is to accept them as final; to take them as a standard; to appeal to them in the sense of arousing them to act for their own satisfaction just as they are? By no means. The teacher who thus interprets them is the only serious enemy the idea of interest really has. The significance of interest is in what it leads to; the new experiences it makes possible, the new powers it tends to form. The impulses and habits of the child must be interpreted. The value of the teacher is precisely that with wider knowledge and experience he may see them, not only as beginners, but also in their outcome, in their possibilities, that is, in their ideals. Here is Herbart's many-sided

interest with its fivefold classification. Here is the interest of the child to talk about himself and his wonderful experiences, and his friends and their remarkable doings. What may it lead to? What is its possible outcome? Here is his interest in scribbling, in making houses and dogs and men. What does it amount to, come to? And so on to the end of the chapter. To answer such questions as these is not only to know the psychology of the child. It is to tax to the utmost the wisdom of the adult, knowledge of history, science, and the resources of art. Subject-matter, in all its refinements and comprehensiveness, is one name for the answer to the question: What shall these dawning powers amount to?

But it is a long road from the beginning to the end, from the child's present needs and tastes to his matured growth. The ground must be traveled step by step. It is always today in the teacher's practice. The teacher must be able to see to what immediate and proximate use the child's interests are to be put in order that he may be moving along the desired line, in the desired direction. The interest to scribble must be taken advantage of now, not in order that ten years from now he shall write beautiful letters, or do fine bookkeeping, but that he may get some good of it now; may effect something which shall open another step in advance, and draw him on from his own crudity. This utilizing of interest and habit to make of it something fuller, wider, something more refined and under better control, might be defined as the teacher's whole duty. And the teacher who always utilizes interest will never merely indulge it. Interest in its reality is a moving thing, a thing of growth, of richer experience, and fuller power. Just how to use interest to secure growth in knowledge and in efficiency is what defines the master teacher. Here is no place to answer. But it is obvious from previous discussion that there will be a distinction according as children are mainly in the stage of direct interest, when means and end lie close together, or have reached a capacity for indirect interest, for consciously relating acts and ideas to one another, and interpreting one in terms of the other. The first, the period of elementary education, evidently requires that the child shall be taken up mainly with direct, outgoing, and positive activity, in which his impulses find fulfillment and are thereby brought to conscious value. In the second, the time of secondary education, there is basis for reflection, for conscious formulation and generalization, for the back-turned activity of the mind which goes over and consciously defines and relates the elements of its experience. Here the teacher can bring the child to consciousness of the larger meaning of his own powers and experiences, not simply through giving them such outlet that the child perceives the bearings, but indirectly and vicariously through reflection upon and absorption of the experiences of others.

INTEREST AND DISCIPLINE.

Just because interest is an outreaching thing, a thing of growth and expansion in the realization of impulse, there can be no conflict between its genuine utilization and the securing of that power and efficiency which mark the trained mind - which constitute real "discipline." Because interests are something that have to be worked out in life and not merely indulged in themselves, there is plenty of room for difficulties and obstacles which have to be overcome, and whose overcoming forms "will" and develops the flexible and firm fiber of character. To realise an interest means to do something, and in the doing resistance is met and must be faced. Only difficulties are now intrinsic; they are significant; their meaning is appreciated because they are felt in their relation to the impulse or habit to whose outworking they are relevant. Moreover, for this reason, there is motive to gird up one's self to meet and persistently to deal with the difficulties, instead of getting discouraged at once, or half-consciously resorting to some method of evasion, or having to resort to extraneous motives of hope and fear - motives which, because external, do not train "will," but only lead to dependence upon others.

The absurdity in much of the current conception of discipline is that it supposes (r) that unrelated difficulties, tasks that are only and merely tasks, problems that are made up to be problems, give rise to educative effort, or direction of energy; and (2) that power exists and can be trained at large apart from its application. (1) A problem is a mental thing, a psychical thing; it involves a certain mental attitude and process on the part of the one to whom it presents itself. Nothing is made really a problem by being labeled such, or because it presents itself as such to a teacher, or even because it is "hard" and repulsive. To appreciate a problem as such, the child must feel it as his own difficulty, which has arisen within and out of his own experience, as an obstacle which he has to overcome, in order to secure his own end, the integrity and fullness of his own experience. But this means that problems

shall arise in and grow out of the child's own impulses, ideas, habits, out of his attempts to express and fulfill them - out of his efforts to realize his interests, in a word. (2) There is discipline or trained power only when there is power to use. Any other conception of "discipline" reduces it even below the level of the professional gymnastic performer—to a level of monkey tricks. If there be anyone who gives up his whole life to getting skill in the solution of charades and enigmas in the puzzle columns of magazines, puzzles which are invented ad hoc, just to be puzzles, he is the one who answers to much in the current notion of mental discipline. But such a conception does not need to be argued against. There is only discipline when one can put his powers economically, freely, and fully at work upon work that is intrinsically worth doing. The failure of mathematics to fulfill its boasted function of discipline is largely due precisely just to this isolation from application. The child who juggles glibly with complex fractions may easily fail utterly at running across the simplest sort of case in actual life. He " never had that kind before;" or he doesn't know "what rule to use." Discipline at large he has plenty and to spare; discipline in capacity to adjust his own knowledge and habits to the difficulties that arise in the natural course of experience he has little of. It would be ludicrous were it not pathetic - and often tragic. But this separation of school power and school discipline from the everyday work and requirements of the world is inevitable when it is thought to secure discipline by making up intellectual problems per se, instead of securing the conditions which compel them to arise in the working out of the child's own nature experience.

CONCLUSION.

In conclusion we may say that little can be accomplished by setting up interest as an end in itself. As it is said about happiness, so with interest—it is best got when it is least consciously aimed at. The thing to do is to get at the conditions that lie back of and compel interest—the child's own powers and needs, and the instruments and insterials of their realization. If we can find the child's urgent impulses and habits, if we can set them at work in a fruitful and orderly way, by supplying proper environment, we shall not need to bother much about his interests; they will mostly take care of themselves. And so, I am most firmly convinced, with the training of his "will." The fact is this supposed divorce of interest and will has its roots and

its vitality in a man-made psychology, which has erected the distinctions due to its own analytic abstractions into independent entities and faculties. Anyway we take it, there is only person — man or child — at the bottom of it all, and whatever really trains that person, which brings order and power, initiative, and intelligence into his experience, is most certainly training the will. We may safely leave it to those who believe there is a distinct somewhat named will in the human individual, outside of and apart from the active make-up and balance of the individual, to invent ways of training that will. For those who believe that will is the name given to a certain attitude and process of the whole being, to power of initiative, of persistent and intelligent adjustment of means to end, training of the will means whatever tends to growth in independence and firmness of action conjoined with sincere deliberation and reasoned insight.

THE DISCUSSION AT JACKSONVILLE.

THE Herbart Round Table meeting at Jacksonville, Florida, February 20, 1896, was attended by a considerable company of those who had read the paper, and were much interested in the discussion. Dr. Charles DeGarmo presided.

Dr. Dewey being absent on account of sickness, C. A. McMurry was asked to introduce the discussion by a brief statement of the points. Afterward the discussion moved on without interruption for an hour and a half. The following is a brief statement of some of the arguments offered in the discussion. This statement was submitted to Dr. Dewey, who adds a short rejoinder at the close.

The first principal criticism raised against Dr. Dewey's paper by Dr. Everest and others was that some of the terms used, such as self-activity, self-expression, and interest, are not clearly defined. It is impossible to tell just what they mean. Mr. George P. Brown suggested that a knowledge of the terminology used by Dr. Dewey in his psychology was necessary to understand this paper. Self-activity and self-expression are familiar terms in this field of thought. The child, for example, desires to realize himself in his play. The flower and the plant are the self-realization of the vital forces in the seed. Self-expression is the natural product of the activities at work in the plant and animal. Dr. Everest noticed that self-realization might be bad. A boy seeks to realize himself in evil directions, as in reading bad books.

Dr. Harris was called upon by Mr. Brown, and answered somewhat is follows: Dr. Dewey's paper was a very able production. He had read it, but was not yet fully satisfied as to its meaning. It well deserves several readings, as do all Dr. Dewey's works. He was inclined to think that Dr. Dewey had forced the situation by his interpretation of interest. He seems to have taken his standpoint from Hegel's *Philosophie des Rechts*. Will is the center and core of the highest pure being. God makes a universe of freedom and evolution.

This is the interpretation of the artist's work in the God who looks down from the Sistine Chapel. Will wills will. Dr. Dewey emphasizes self-expression, and has modified this to point toward interest.

But interest points toward pleasure. Kant's criticism of Hedonism is correct forever as against interest. Pleasure is an ambiguous term, good or bad. Behind this uncertainty you can masquerade ad libitum. You can masquerade behind interest as an equally ambiguous term. Interest is a low thing, a high thing, and a middle thing. It is a hat that covers too many things. The good and the bad are brought together under one term. The advocates of interest should specify just what they mean under that term. Self-activity itself is a law of development only when man wills to promote the best self-activity in the world at large. Dr. Dewey is wrong in this interpretation of Kant. When the materials of instruction have been selected, it is the proper thing for the teacher to make them interesting to the children.

Dr. White thought that interest is a vague and indefinite term. Interest does not lead up to desire and motive. If interest determines the deed, how shall we dodge the conclusion that all morals break down? It is easier to act in the direction of interest, but duty sets its heel on interest in the highest concerns. This idea of interest is a soup theory. Children should not be allowed to run in the direction of their interests. In all the real efforts of life and of experience, at least, we are called upon to sacrifice pleasure to duty.

Dr. Harris remarked that Dr. White's idea was based upon the ambiguity of the meaning of interest. We should fasten on to the real aims of the child. Frank McMurry called attention to the fact that love prompts to action. Dr. White wanted to know if love had anything to do with interest. The reply was that love and interest are of the same kind, love being a more intense form of the other. Mr. Gillan wished to know if interest was present in the painful; in toothache, or in the amputation of one's arm. Mr. Powell thought the effort to get rid of pain was a mediate interest. Mr. Sutton called attention to the sentence, beginning as follows: "The fact that they are repulsive indicates that we do not consider them intrinsically connected with the desired end," etc. It was further remarked that pain itself is not the source of motive. The desire for health, for the removal of pain, or any obstacle, is the real source of interest.

Mr. Treudley and Dr. Harris were drawn into a discussion of the will of man as related to the will of God, and how far the finite will is a form or expression of the infinite. Toward the close of the discussion, Charles McMurry raised the question as to the pedagogical value of interest. Those who advocate interest as a vital element in teach-

ing are charged with ambiguity, good interests and bad interests. The opponents of interest, however, reject both the good and the bad. They deny the value of interest in toto. They are at least as much at fault as the supporters of the theory of interest. The defenders of this theory are in no doubt as to what interests they wish to cultivate. It is the genuine, the high interests, the ideals, which they wish to promote. No one doubts this. Herbart, as a philosopher, attempted to point out six great sources of true interest, so that no one can be in doubt as to what is meant, essentially, by the advocates of interest. Moreover, all the most important terms are subject to the same ambiguity which is charged to the term interest. Will-training may be good or bad; self-activity may be good or bad; education may be good or bad; and yet we use these terms, and we understand what we mean by them.

We need an answer to this question: Shall we accept Dr. Dewey's analysis of the psychology of interest? He has given a full and masterly analysis of the natural movement involved in ideas, interest, desire, motive, and effort. Shall we accept the place and value given by Dr. Dewey to interest in the process of learning? The pedagogical problem is a simple and direct one.

Dr. Dewey, not having been able to be present at the discussion, desires to add the following to the foregoing report. "Of course, the term interest, taken without explanation or discussion, is ambiguous. If it had a meaning which was fully elaborated and universally recognized, no scientific interest would attach to further discussion. All terms which at a given time are centers of discussion have a like ambiguity. The discussion occurs precisely to clear up this ambiguity. The entire preceding paper is an attempt to discover what the genuine meaning is which must be attached to the term, on psychological grounds, and what the corollary is as to the proper educational use of interest. The analysis given and the application made may be quite out of the way, but I see no way to advance matters except to formulate and then criticise such statements. Discussions of interest, based on purely arbitrary definitions of the term, underived from any psychological analysis, are of no help; and mere complaints of the ambiguity of the word, disconnected from examination of an attempt to give its true import, leave the ambiguity just where they find it. As a basis of discussion any detailed formulation must be of use, no matter

how erroneous, and I hope the foregoing discussion may receive enough examination and criticism to help us on to a true conception of the psychical nature and educational use of interest. Cut and dried definitions are to be avoided rather than sought for in psychology; what we need is thorough analysis preceding such definitions. It may be remarked, however, that such summarising definitions occur in the previous paper."

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"The best Herbartian discussion I have found is Walsemann, Das Interesse; with this may be compared Grössler, Das vielseitige Interesse, and Vieth, Vielseitiges Interesse. Kern, Grundriss der Pädagogik, is also quite explicit. Hegel's criticisms on Kant are scattered all through his works, as sec. 135 of his Philosophie des Rechts, but are best summed up in his works, Vol. II, pp. 304 ff. The quotation from Hegel is found in Philosophie des Geistes, sec. 475. He also says in this same paragraph that the agent never acts without interest."

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The National Herbart Society.

PLAN AND PURPOSE.

The National Herbart Society was established for the purpose of securing a scientific study and discussion of leading problems in public education. It has thus far published four Yearbooks with their Supplements, and has contributed largely to deepen the knowledge and interest of teachers in important questions.

It is the purpose of this society to secure the ablest treatment of these topics in the Yearbooks, and a free and full discussion of them from every important standpoint. A Yearbook is published and distributed to the members in June of each year, about a month before the meeting of the National Educational Association. A Supplement is also published and sent to the members before the meeting of the Department of Superintendence in February of each year.

Four Yearbooks with their Supplements have already been published.

CONDITIONS FOR MEMBERSHIP.

The society desires the regular membership of all teachers and others who are interested in the questions discussed. Membership costs one dollar per year for each person, and entitles the member to one Yearbook and Supplement. Previous Yearbooks and Supplements may be had at the same rate.

LOCAL CLUBS.

Many local Herbart Clubs have been formed throughout the United States for the study and discussion of the Yearbooks and Supplements.

Where a local club of four or more persons is organized, the fee for each person is 75 cents per year. In such cases the organizer of the club will remit the fees to the Secretary and receive the Yearbooks for distribution. Such a club usually holds regular meetings for the discussion of the Yearbooks or other literature recommended by the society. Those desiring membership, singly or in clubs, should address

CHARLES A. McMurry,
University of Chicago, Chicago, Illinois.

SECOND

YEAR-BOOK

OF THE

NATIONAL HERBART SOCIETY.

FOR THE

Scientific Study of Teaching, Prepared for Discussion at the Buffalo Meeting of the N. E. A.

EDITED BY

CHARLES A. McMURRY, Secretary,

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PREFACE.

The Second Year-Book of the National Herbart Society is designed for full and careful discussion at the coming Buffalo meeting of the N.E.A.

Two of the topics of the present Year-Book are a continuation of the discussions begun in the First Year-Book. Dr White's paper, with the reply to it, continues the discussion of the subject of Concentration. The symposium on the Culture Epochs comes from thinkers of widely differing standpoints and opinions.

Dr. Luken's article on Child-Study is closely related to the Culture Epochs discussion. Dr. DeGarmo's article on Interest sums up a discussion that has been of great importance to teachers.

Miss Colby's article on Literature in the High Schools handles one of the great topics of secondary instruction.

The members of the Herbart Society, and all others interested in these papers, should read them carefully before going to the Denver meeting.

The Year-Book will be in the hands of members about four weeks before the beginning of the meeting. This will give ample time for a careful study of its contents.

Those wishing to purchase copies of the Year-Book at 50 cents each, or to secure membership, should apply to the secretary.

At the close of this Year-Book will be found a statement of the organization of the Herbart Society, and of the terms for membership.

Books can be secured also at the headquarters of the N.E.A. at Buffalo.

CHARLES A. McMCRRY, Secretary, Normal, Ill.



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THE SECOND YEAR-BOOK.

ISOLATION AND UNIFICATION AS BASES OF COURSES OF STUDY.*

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An important condition in the development of any science is the use of clearly defined terms to denote its facts and principles. This is strikingly illustrated in the development of the natural and physical sciences. The terminology of chemistry, physics, and biology has made these sciences possible. It is difficult to see how they could be presented in language without the use of definite technical terms, not only to denote phenomena, but principles and laws. Most of the terms in the present science of electricity lie outside of the vocabulary of the general scholar, and are known only to specialists in the science. The same is true, to a greater or less degree, of all the modern trades, professions, and arts. Each has a large glossary of technical terms peculiar to itself, each term having a definite meaning.

It is one of the recognized infelicities of the science of psychology, that so many of its terms are in general literature, where they are used in varying and often diverse significations. Indeed, one of the first conditions of the intelligent reading of a work on psychology is the determining of the definite meaning of the terms used by the author -not always an easy task. No psychologist who uses important terms in different senses, or with the meaning obscure, can be a successful author. This is especially true in that branch of psychology known as moral science or ethics. Much of the inconclusive and fruitless discus-

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sion which besets the student of ethics, is due to the fact that the disputants use terms in different senses. A common source of disagreement is the use of words by one party with a larger or smaller content than the other, and this is true, even when these contents contain a considerable common element.

We thus approach one of the serious obstacles in the development of a science of pedagogy. Its terminology presents a most striking contrast to that of the physical sciences. Many of its terms are borrowed from psychology and ethics, not a few from philosophy, and these from authors who use the same terms in different senses. In deed, the science of pedagogy has a very small vocabulary of technical terms which are used by all writers with the same meaning. This fact is the source of wide confusion in thought and much fruitless discussion. It must be evident to every careful observer that the movement in recent pedagogical inquiry is the reverse of the movement in other modern sciences. Instead of careful differentiation, and the use of special terms to denote things that differ, there is in pedagogy much ambitious generalization, and the use of terms that express indefinite and vague entities, socalled-terms that have been appropriately called "blanket words," since they so readily cover a group of diverse ideas. I frankly confess that I read articles and listen to addresses on pedagogy that baffle my understanding, not, as I flatter myself, because they are too deep for me, but because of their vagueness and obscurity. Much of the present conflict of opinion in pedagogy is largely due to the fact, that those who differ do not understand each other, and it is doubtful if each one always understands himself.

We have an instructive example of this difficulty in the discussion of the past year over the place and value of "correlation," "coordination," and "concentration" in school instruction. The discussion has been a Babel confusion of ideas, if not of tongues, and well-meant attempts to settle the pedagogical meaning of these terms have only added to the confusion. After all that has been said, several writers for the educational journals are using the incon-

gruous terms coordination and concentration as synonymous. One of the surprises of the profession was the expressed expectation that a recent report on the "Correlation of Studies" would be devoted to a discussion of the theory of concentration!

The desire to be understood in the present paper has led me to avoid as far as possible these badly "mixed-up" terms, and to use, instead, terms that are more definite and fundamental. For this purpose, I have selected the terms "isolation" and "unification" as denoting opposite processes and results.

The term isolation, as used in this paper, denotes the separation of a branch of study from other branches for the purposes of instruction,—the teaching of it in a separate exercise. I do not use the term in the sense of exclusion. The isolation of a branch of knowledge in instruction does not involve the exclusion of all the facts and skill that may have their origin in other branches. For example, the isolation of arithmetic as a school exercise does not mean that the data for its problems may not be taken from other branches of study. It simply means the making of instruction and drill in number the central and controlling end of the exercise, the unit of activity. The same is true of isolation as applied to the other branches of the course.

The term unification is used in a contrary sense. The unification of two or more branches of study means their union in instruction in such manner as makes them one branch, with a common sequence of facts, and taught with a common end or purpose. The term is not limited to any particular mode of uniting the several subjects. For our present purpose, it makes no difference whether they are united as coordinate elements, or whether one is made the principal or core and the others subordinated to it, as we construct complex sentences.

The term in floation is however, exclusive of isolation. It does not include the teaching of branches in separate exercises, however ski, fully these exercises are related to each other. If two branches are taught in separate exercises each having its appropriate and special development,

they are not unified in any true pedagogical sense. For the purpose of instruction, they are isolated. Nor is this fact of isolation changed if the several separate exercises all center in the pupil, and actually contribute to one teaching result. All rational instruction necessarily centers in the pupil, and, in this respect, methods do not essentially differ. The essential fact in complete unification is the unity of the subjects or branches in actual instruction-

their oneness in the teaching process.

This leads to the natural division of the studies of a school course into coordinate groups or unities. Fortunately, this subject has been too ably and too exhaustively discussed in this presence to require further elucidation. The only question is, whether there are more or less than five coordinate groups of studies. Dr. Harris admits that there is a sixth coordinate group of knowledge, the one that includes religious truth (the fifth in Dr. Thomas Hill's "hierarchy of studies,"); and Dr. DeGarmo's earnest plea for the recognition of three coordinate groups, the third being called the "Economic," necessitates, if conceded, the adding of a seventh coordinate group, a group that includes drawing, construction, book keeping, etc., and better designated as it seems to me, the industrial air group. Whether these two additional coordinate groups be or be not recognized as belonging to the school course, does not concern our present purpose. The important fact is that while these coordinate groups whether five or seven, have certain interrelations, they have a different origin, a different law of sequence, and, as a consequence, a different development; and it follows that no one of these coordinate groups can be united with another coordinate group by making the one or the other subordinate. Coordinate entities can not be unified on the principle of subordination. This is a fact of prime importance in pedagogy. If the existence of coordinate groups of studies be once conceded, the Ziller theory of concentration is left in the air, since this involves subordination.

It is also plain that in discussing the question of unification, a clear distinction must be made between the unifying of allied subjects in the same group, and the unifying of subjects that belong in different coordinate groups. A failure to observe this distinction is resulting in much confusion. There is necessarily a close relation between subjects in the same natural group, and their union at different points in instruction may, as a consequence, be both feasible and desirable. But the unifying of coordinate branches is a different matter. Take, for example, the several subjects that make up the mathematical group. Whether arithmetic, algebra, and geometry shall be taught tandem, or the elements of algebra and concrete geometry run abreast of arithmetic in the latter part of the arithmetical course, is a pedagogical question that can be best settled by experience. This is simply the proper correlation of allied subjects within a group; but the harnessing of mathematics to history, or to natural science, is another procedure. This is constituting a team of pedagogic animals that do not naturally travel the same road or in the same direction! The unifying of allied subjects within a group and the unification of separate coordinate groups are very different pedagogic problems. The distinction has a parallel in the difference of the powers of the signs + and — and the signs × and + in algebra, the former denoting relations between terms, and the latter the relations of numbers within a term. It is important to keep this distinction in mind, for it is easy to pick out facts, and even groups of facts, in allied subjects which are so closely related that they may de taught together with obvious advantage; and then cite these instances as evidence that unification is a universal principal of teachmg.

It should also be kept in mind that the unifying of closely related facts or groups of facts, selected from separate branches is not the unification of the branches as wholes. A teacher may, for example, use the transparency of glass to illustrate the meaning of a lucid style in writing, but this would hardly be the unification of physics and rhetoric. The pedagogic purpose is not to teach the transparency of glass. The same is true when the skill acquired in one branch is used as an aid in teaching another. Thus, skill in drawing may be utilized in

teaching geography, but this is not, in any true sense, the unification of drawing and geography; and whenever it may be desirable to call such a procedure unification, care should be taken not to broaden the meaning to a unifying of the branches of study.

We are now prepared to ask whether either isolation or unitication can be made the basis of a course of study. It may be helpful in this inquiry to note, that each of these principles may have three quite distinct degrees of application, as shown in outline on next page.

It is here seen that isolation is considered complete when it applies to each branch of instruction, whether the end be knowledge or skill, and to each branch from the beginning to the end of the course. It seems unnecessary to add that this degree of isolation is not found in the American school. Spelling and reading were united more or less closely long before I was a pupil, and the same has long been true of the elements in other allied branches. Complete isolation is neither practicable nor desirable.

The second degree of isolation more nearly represents the practice of the more modern school. The coordinate groups of studies are isolated in instruction, except in the lowest grades, and the well-defined branches in each group are taught as a rule in separate exercises. There is, however, an increasing blending of the school arts especially in primary grades, the arts of reading, spelling, writing, and language having many close relations and possible interunions. Advantage is also taken of the natural relations between allied subjects, and there is much incidental blending of these subjects in actual instruction. But in many schools unification is not intelligently sought as an end. What is done in this direction is incidental, and only the more simple associations are attempted. Isolation is the dominant principle, unification being incidental and exceptional.

The third degree of isolation will be best explained in connection with the same degree of unification.

Complete unification is the blending of all subjects and branches of study into one whole, and the teaching of the

same in successive groups or lessons or sections. When this union is effected by making one group or branch of study in the course the center or core, and subordinating all other subjects to it, the process is properly called the concentration of studies. In such a unification of subjects the principle of sequence and development of the central or core study necessarily dominates the entire group, and the proper development of each subordinate study is sacrificed. Nor is this result avoided by making the child the center, whatever this may mean, since this ignores the principle of development in all branches. Complete unification of school studies is neither practicable nor desirable.

In the second degree of unification all branches and subjects are united in two or three coordinate groups, each with a central core. It recognizes coordination as a true and fundamental principle in a course of school studies; and it allows each coordinate group to have its own principle of development, contenting itself with those natural and simple associations which are easily established between subjects in the same group. It also permits the isolation of the coordinate branches in actual instruction, and their systematic treatment. All this means much, for, if the principle of isolation applies to coordinate groups because they are coordinate, it necessarily applies to all of the coor linate groups in a course whatever be the number of such groups

If the attempt to subordinate mathematics to literature or history leads to fantastic results, as is obvious, the same will be true of an attempt to subordinate either physical or biological science to the so-called culture studies. Hence the argument for two or for three coordinate groups, each with its own sequence and development, concedes the whole ground, and we thus again reach the fact that no two coordinate branches of study can be wisely unified by making one subordinate to the other. Coordination excludes mib ordination.

ISOLATION-THREE DEGREES.

First Degree.

COMPLETE.

All Branches

taught

separately

throughout

the course.

Second Degree.

GEN'L ISOLATION,
with
incidint'l blindings,
especially
in
Primary Instruction,
including
the
language arts.

Third Degree.

COORDINATE BRANCHES

for

development and drill;

with

rational blendings

of

Allied Subjects

when relations

are close and helpful,

especially in

Elementary Instruction.

UNIFICATION - THREE DEGREES,

Therd Degree.

ALLIED SUBJECTS

at points

of

close relation.

especially in

Elementary Instruction,

with

isolation of all

Coordinate Branches

for

special development

and drill.

GROUPS.
All branches
united in
two or three
Coordinate Groups
each with a
Central Core,
incidental isolation
of branches for
special development
and drill,

First Degree.

COMPLETE.

All branches united in one

Organic Whole with a

Central Circ.

A glance at the outline given above will suffice to show that the third degree of unification and the third degree of isolation are practically the same. They differ chiefly in emphasis, one putting the emphasis on unification and the other on isolation. Both agree in the unification of allied subjects and closely related facts, and both require the isolation of coordinate branches for development and drill. Neither proposes to subject one branch of study to the principle of development that belongs to another, but each branch and subject is to receive such separate treatment as its nature demands. Both agree that unification is most feasible in elementary instruction where the association of facts is often simple and easy.

It is obvious from this survey that the practical application of the principle of unification falls largely within the details of actual instruction If closely related facts in different branches are to be united in instruction, it must be done by the living teacher; and hence the problem of unification belongs more to the art of instruction than to the curriculum of studies. The curriculum should, however, not only include the five coordinate groups of studies, but the sequence in each group should correspond with the psychical development and progress of the pupil. Since human knowledge is the result of human knowing, every branch of study has natural phases that correspond to the psychical phases through which pupils pass as they ascend in the course. A true course of study not only properly correlates the five coordinate groups of studies, but it cuts off a section of each in every round of its ascent. It thus adjusts, so far as this can be done in a scheme of studies, the exercises and disciplines of the school to the psychical condition and needs of the pupil. Studies are thus put in right interrelation by being put in right relations to the pupil. The child is, in this psychological sense, the center of a true course of study.

These facts suggest the mischief that may lurk in an exaggerated view of the importance of unifying all the studies of a child. The attempt, for example, to associate every fact of nature with literature may give now and then a beautiful, even striking, lesson; but nine-tenths of the important facts of nature cannot be hitched to a poem. The attempt to establish such associations inevitably re-

sults in fantastic, and even ridiculous, combinations. Nor can I see much promise in the effort to unify all branches of instruction by universal relations. There may be a "causal flexus" that binds all knowledge into an organic unity, but children are not philosophic spiders that gather knowledge by excursions over a web of philosophic causation.

It is seen from the foregoing survey of the subject that the principle of unification cannot be made the basis of a rational course of instruction—much less of a curriculum of school studies. Its most fruitful applications are in teaching allied subjects within the several coordinate groups, and here chiefly in teaching the elements. It also has an important place in teaching the more closely related facts in different coordinate groups, known facts in one group being used in teaching related facts in another group. Here is the recognized field for the practical application of the principle of unification, and such application promises valuable results.

But the obvious principle that underlies not only courses of study but methods of teaching, is the fact that every coordinate branch of study has its own natural sequence and development, requiring its isolation and separate treatment. Instead of the concentration of all branches of study by subordinating all the rest to one central core, there must be increasing differentiation and isolation, with proper recognition, of course, of all important inter-relations. It thus appears that isolation is the dominating principle in a true course of study, unification having its place and function chiefly in the processes of instruction.

One more observation seems a fitting conclusion to this study. It does not follow that facts taught separately remain isolated in the pupil's thought. The mind is endowed with the power of assimilation and unification, and this power is more fundamental in education than is dreamed of by some philosophers. Were the assimilation of knowledge or the unification of mental power dependent upon the philosophic mixing of the materials of instruction in the mind's hopper, I fear that most of us now present would be idiots. We have all been doing a little assimilating and

unifying on our own account, and have actually been able to see some of the simpler relations between facts not learned in the same school exercise, or in the same day, or even in the same year. It may be true that few of us have seen many of the "universal relations," which, according to the somewhat uncertain testimony of philosophy, bind all knowledge into one "organic unity," but we hope to get more of these insights, at least in the next world. Nor are we much comforted with the suggestion that a child can be made to feel the oneness of all knowledge, even though he may not intellectually apprehend it. The feeling of a truth not present in the mind seems to border on mystery! It is a wise child that sees the immediate relations between the more common facts of observation and experience.

A REPLY TO DR. WHITE'S PAPER.

BY CHAS. A. MC MURRY, NORMAL, ILL.

The following reply to Dr. White a Paper is in part an effort to clear away some of the misconceptions which have sprung up in the minds of many relative to the dea of oncentration. It is also at attempt to analyze Dr. White an iton of sciation and to draw the necessary inferences from that dea. Doubtless some of these inferences will be objected to as outrary to the weil-known pedagog cal principles often expressed in Dr. White a writings and lectures. This reply is not an attack upon Dr. White a system of pedagogy for upon certain trews expressed in this Paper. The question may be raised whether Dr. White in his antagonism to the idea of concentration or correlation has not been led into statements with a are antagonistic also to his own previously expressed views. In this reply there is not accompanied as to purpose of assailing the long and himorable career of Dr. White as a progressive educator.

In this discussion both parties will admit the value of each principle under discussion, that is isolation and unification. We may not agree, however, as to the meaning of the term unification. In some phases of the discussion we seem to approach substantial agreement. The matter in question is the relative importance of the two principles in determining the arrangement and mutual interrelations of studies. There need be no serious dispute as to what the studies are which are to be so related. The common school course will be made up of essentially the same studies in either case. The important question now is not what studies, but how are they to be organized and adjusted to one another in the school course? There is a single point in which this controversy finds its center and its explanation. It is best expressed by the word relations,—the closer relating and binding together of all studies and of all forms of knowledge in a child's mind.

The complaint is often made, and also by Dr. White, that correlation, coordination, and concentration are mixed and confused terms, but the offense suggested to the minds of many by the mention of these terms is due to the fact that they are unwilling to grapple with this idea of relations. The same idea underlies all these terms, but in modified forms. Dr. White prefers to emphasize isolation, the exact opposite of the idea involved in all these terms. The

fact that these terms are mixed is not the main offense, but rather that they all mean the same thing, the same objectionable proposition is involved in them all, namely, a closer interrelation of studies.

The notion of concentration does not involve the mixing of studies. There is no good ground for supposing that concentration means the mingling of two or more studies in equal portions in a single recitation. Every study that is important enough to be a study has its appointed time in the program, during which it dominates the work of the hour and everything else is incidental and secondary. This is true also of those studies which are subordinate to the more important ones. Language lessons, for example, may derive their thought materials from geography, or natural science, or history, but the treatment of these materials in the language period is strictly for language purposes. When once the series of topics in geography or language or any other study has been fixed, it remains for the study period devoted to that subject to occupy itself primarily and chiefly with that study, and only to use other ideas and materials derived from other studies as those materials aid to explain or illustrate the topic in hand. To branch off into some other subject, no matter how closely connected, and to become absorbed in its treatment, means simply to be side-tracked, to lose one's bearings, to be guilty of illogical and unsystematic thinking.

Dr. White introduces the term unification for the purpose of avoiding the confusion associated with the terms correlation, coordination, and concentration. There is much prevalent confusion and mixing of these terms, but it seems to me doubtful whether Dr. White, by introducing still another term, has done more than to add to the confusion. "The term unitication," he says, "is, however, exclusive of isolation. It does not include the teaching of branches in separate exercises however skillfully those exercises are related to each other." If this is the meaning of unitication it is a nondescript, an extravaganza to begin with and has no place in pedagogical thinking. But it should be clearly understood that concentration, even in

the extreme view held by Ziller, has no resemblance to this nondescript unification set up by Dr. White. There is no disposition among the disciples of Herbart to teach two or three studies in an hour, to mix and mingle different branches, in the same recitation. To assume this is simply a perversion of the idea of concentration from the meaning which has been abundantly defined and illustrated by the disciples of the doctrine of concentration.

There are some very knotty problems not yet satisfactorily solved by the advocates of concentration, but they can not be ignored because some people identify concentration with the mixing of studies. The isolation of the separate studies into distinct periods and the absolute predominance of each study within its own sphere is a fundamental condition of any course of study whether under concentration or under some other name. This is also true whether some studies stand in a subordinate relation to other studies or not. A subordinate study, when once its topics have been selected and arranged, should be handled in a series of independent recitation periods during the time of which its topics are the prevailing, controlling thoughts, and the relations to other studies are only incidental. Before assuming that concentration involves a mixing and confusion of studies it would need to be shown that its disciples either expressly sanction it or unwittingly bring it to pass.

Rein says, p. 20, (Erstes Schuljahr). "Concentration requires only that one form (study) of instruction seek and find points of contact with another form, the material worked over in one study must be recapitulated in another, and that which has been handled in one branch of instruction must be turned over to another for further elaboration. Every branch of study must presuppose that the other study either has or will do its duty in its own peculiar way, with the material which concerns them both. It is only this sort of mutual interaction between the branches of instruction which is demanded by genuine concentration." It can easily be shown that there are topics in which two or more studies are nearly equally con-

cerned. The Hudson river appears, for example, in both history and geography, and the knowledge gained in one is a direct support to the knowledge gained in the other. The point of the criticism against unification of studies as defined by Dr. White is that it means amalgamation of what ought to remain separate branches. It is assumed without further proof that concentration, because it subordinates some studies, has the same fatal defect—the amalgamation of studies. For one, I am not prepared to pass final judgment upon Ziller's plan of concentration, either for or against. But there is no sufficient proof as yet that it leads to amalgamation of studies. Even if we reject Ziller's theory of concentration in its extreme form, it still suggests important phases of correlation of studies, which must be worked out.

Dr. White's discussion of school studies seems to set up the branches of school instruction as ends in themselves, as an ultimate goal in education. Each of the three or five fundamental lines of instruction stands out clear and distinct, naturally and artificially isolated from one another, and the isolation is looked upon as the fundamental principle underlying the course of study, because otherwise the sequence and unity in each branch may be threatened. The five fundamental studies are set up not only as having rights of their own, but as a sort of finality in education. There is a very apparent tendency in all this isolation and emphasis of distinct branches of study to forget two of the most vital requirements of education

1. The direct relation and value of knowledge to a child's mental growth, which is in itself more important than the formal system of the sciences. Dr. White, I have so doubt, will accept this statement, and claim that his arrangement of studies is planned with this very child psychology in mind. And yet the emphasis placed upon this formal isolation of the sciences, as sciences, seems to me to set up a controlling influence in the arrangement of studies, which emanates not from the child but from an external or objective view of certain bodies of knowledge in their purely scientific aspect.

2. The relation of scientifically organized and classified knowledge to the practical world of men and things in the midst of which a child has to live and act.

In laying out our school course and in determining the relations between studies, we cannot be governed solely by the fact that the sciences require a certain degree of isolation in order to be brought into systematic order. This is only one among three perhaps equally important considerations. If the studies as sciences demand isolation in order to be understood and mastered, as separate sciences, the mind of a child on the other hand, sets up an imperative requirement for unification. No matter how many sciences, nor how much knowledge and experience a child may acquire, they must be organized and unified in his own consciousness or they are fatally defective.

Again, the reduction of different kinds of knowledge to scientific system in separate studies must always be regarded as simply a means to an end. The great end in view in every study is to get a better understanding of the world of men and things around us. If the isolation of a single study leads to a better understanding of that study in its relations to the world and in its practical influence as a part of the environment of life, then isolation is important as a means to a much more important end. In the world of business and of life-activities the studies are not isolated. Now if the purpose of all education is to give a child an insight and a mastery of the school studies as artificially arranged and classified in books and schools, and not to give insight and mastery of life experiences and surroundings as they come to us, in practical life, then isolation of school studies may be looked upon as a goal in education.

But we are now fully awake to the fact that the most difficult thing in education is not the scientific mastery of facts as given in text books and schools, but the ability to turn our school-acquired knowledge into useful channels in the tangled relations and difficulties of real life. School sciences are at the best artificial and unpractical. It is certain that the classification of the sciences and their isolation are the necessary prelude and introduction to a mas-

tery of the sciences in the actual relations of life. In other words, isolation of studies is unavoidable. But isolation is not the chief nor the final step in the mastery of the sciences.

To say that isolation is the dominating principle in a true course of study is to set up as fundamental a principle which flatly violates what Dr. White shows is a natural and powerful trend in a child's thinking. He says: "The mind is endowed with the power of assimilation and unification, and this power is more fundamental in education than is dreamed of by some philosophers. Were the assimilation of knowledge or the unification of mental power dependent on the philosophic mixing of the materials of instruction in the mind's hopper, I fear that most of us now present would be idiots." In this sentence Dr. White is a most successful refuter of his whole theory of isolation as a fundamental principle. If isolation had its perfect work, we should all remain idiots. But by virtue of the inborn native trend toward unification, the child saves himself from the isolating tendencies of his teacher. If children have such a strong native impulse to unify their ideas, why should not the teacher work in harmony with these universal native instincts rather than in opposition to them? But Dr. White has stated the case too strongly. We believe fully with him that children have an inhorn tendency to relate and unify ideas, but is this, like digestion, a self-regulating process? Is it, then, easier to organize ideas, to think relations, than to acquire facts? Is it easier to trace out the relations between sciences than to learn the facts in one science? Is the process of abstract thinking and of broad survey by which order and organization are brought about in ones mental resources—is this camer than the simple accumulation of data in separate sciences? Should teachers labor with all their energy to collect and inventory the facts in isolated sciences-the easier thing because the children when left to themselves will organize their knowledge -the more difficult thingwithout help?

Our psychologists all agree that the power to think relations is more difficult than to learn facts, that the

broader the relations and the more abstract the thinking the more difficult it is. The power to think beyond the bare facts, to trace out relations and sequences is generally considered a sign of a real thinker. Teachers generally in dealing with children can get them to memorize facts and classifications and even rules and principles; but to get children to think independently, to reach beyond the facts and principles stated, that is to think relations is a thing only partially attained and is too much limited to the better pupils. To stimulate children, therefore, to independent and broader thinking is a much higher aim and more difficult of attainment than the mastery of isolated sciences. And yet all expert teaching stimulates this kind of self-active thought-work.

An analogy may be drawn between the growth of knowledge in the mind and the construction of a building. We say that all a child's knowledge finds its center and unity in the conscious self or ego. The ego has partaken of all these experiences, remembers them as parts of its own life and this memory is the thread that binds all together in one personality. Now in the construction of a large stone and brick building we find division of labor and materials among stone and brick masons, hod carriers. plumbers, plasterers, contractors, architects, etc. There is a certain degree of isolation in the separate parts of the work, the stone-cutters are busy in one place upon their materials, the brickmasons have their place and tools and work, the carpenters likewise, the work and the materials are isolated for convenience. But underneath all this variety of materials and work is the unifying plan of the architect followed out by the contractors. Not a man's work or materials but has its place, not a stroke of work done but to a specific end. Everything moves as regulated by the plan that unifies the whole, even to its smallest details.

In this case we may say that the principle of unification is fundamental, the idea of isolation incidental. As a child builds up the body, the complex of his knowledge and experience, should there be less or more of unity than in the construction of a building? The nervous system looked

upon as part of an organism is more closely unified than any building. The brain as a nervous center dominates the whole, as an absolute monarch from a throne issuing orders. Now as we venture to peep into the citadel of the mind itself, shall we look for isolation or for unification? What is the normal condition? What is the condition of power and efficiency? Organization, association, and close linking together of all the mental resources, or isolation, separation into inaccessible parts, division of resources, etc?

It is noticeable that Dr. White nowhere in this discussion emphasizes the relations between different studies. He says: "It is obvious from this survey that the practical application of the principle of unification falls largely within the details of actual instruction. If closely related facts in different branches are to be united in instruction, it must be done by the living teacher, and hence the problem of unification belongs more to the art of instruction than to the curriculum of studies." We are not at all disposed to quarrel with Dr. White as to the important function of the teacher in bringing about a multitude of relations between studies. On this point we can fully agree-But in laying out the school course, how far shall the principle of relationship between studies determine the selection and arrangement of material in the different branches?

The number and value of relations depend upon the selection and arrangement of studies with reference to one another. The teacher is really hindered by the present extreme isolation and lack of connection between studies from making the proper relations.

According to Dr. White's statements, the principle of unification, as he calls it, has little or nothing to do with laying out of the school course. He says further—'A true course of study not only properly correlates the five coordinate groups of studies, but it cuts off a section of each in every round of its ascent. It thus adjusts as far as this can be done in a scheme of studies, the exercises and disciplines of the school to the psychical condition and needs of the pupil—Studies are thus put in right interrelation by being put in right relations to the pupil."

This passage comes as near to a full recognition of the importance of interrelations between studies as anything in Dr. White's paper. A close study and discussion of this passage may serve to bring out clearly the positions of the two contending parties. It has a strong appearance of coming close to the truth; but when driven to express itself in practical form it will be found to be simply a strong statement behind which to defend the present school course and the present isolation of studies.

It assumes that if each study is properly taught in its isolation, the relations of the studies to one another will, in the main, take care of themselves.

Dr. White seems to think if we lay out the course of study by making each one of the five coordinate groups independent in its sequence and essentially isolated from the other studies that incidentally, proper correlations will be provided for. It is precisely at this point that controversy steps in and the very strongest objectious can be raised to a course of study worked out on this principle. In other words, the number and variety of important relations between different studies which can be brought out in instructions depend to a very large extent upon the grouping of the different studies with reference to one another in the original plan of the course of study. Take any one year of the school course, and the number of proper and significant relations between the studies depends almost wholly upon the selection of materials in the different studies with a view to multiplying opportunities for close connection.

In the fourth grade, for example, some schools have adopted the following course in history, geography, natural science, and language. The history stories of the early exploration and settlement of the Mississippi Valley consist of a series of biographies, touching nearly every part of the Mississippi valley and the Lake region. The geography topics for the same grade consist of a collection of the most important geographical ideas and features of the same region (the Lake and Mississippi Valley.) The science topics of the fourth grade are drawn also chiefly from the forests, prairies, streams, natural products, climate, etc., of the

home locality as a part of this great valley. The language lessons, also, in teaching children the correct forms, spoken and written, make abundant use of these interesting materials drawn from history, geography, and science.

(It may be stated in passing, that each one of these studies is treated in separate recitation periods, wholly distinct from other studies, and there is no intent to mix two or more studies in the same recitation.)

A glance at this collection of parallel studies in the fourth grade will show conclusively that a multitude of natural and significant relations between the different studies is provided for in the very process of laying out the school course for the year. If, instead of the suggested plan for fourth grade, we have history stories of the Mississippi Valley, geography topics on South America, language lessons totally distinct in their materials from the other studies, and science topics from any accidental or independent source, is it not evident that the number of natural relations would be diminished by a very large per cent? Would it be extravagant to say that such a course of study properly correlated in the plan given would have ten times as many significant relations as a plan which ignored such a principle? It may be left to the candid judgment of readers which of these two pictures our present course of study in the schools most resembles.

Our contention, therefore, is that the proper interrelations between the studies depends primarily upon the wisdom of those who lay out the school course with a view to proper correlations, and secondarily, upon the skill and thoughtfulness of the teacher in the midst of the processes of instruction.

This, to my mind, is one of the essential points in the controversy. Most people in the course of their lives have wondered at the isolation and in many cases almost total unconnectedness of different studies pursued at the same time. The great question now under discussion is, How can the studies be selected and adjusted in a general plan that will conduce to much greater closeness and variety of relations than our present course permits? Those who em-

phasize isolation constantly ignore this living and urgent problem.

Dr. White bases his argument against what he terms unification and in favor of isolation upon two principal grounds; first, upon the idea of coordinate branches of knowledge, illustrated by Dr. Harris's five coordinate groups, and second, upon the idea of the necessary sequence which should determine the order of topics in each important study or group. In order to get this argument clearly before us, we will quote somewhat at length from Dr. Harris. The report of the Committee of Fifteen, and Dr. Harris's paper at Jacksonville upon "The Five Coordinate Groups," are the important references. Summing the matter up in his Jacksonville address, Dr. Harris said:

"In the detailed consideration of literature, arithmetic, geography, grammar, and history, much pains was taken to show the scope and significance of these studies. Their differences, both objective and subjective, were pointed out. It was shown that their study calls into activity different methods of observation and different trains of thoughtdifferent categories of mind, so to speak. It was shown, objectively, that these branches cover different portions of the map of human learning, lying in some places contiguous to one another, and sometimes widely separated. In the light of this explanation, it will be seen that the Committee of Fifteen intended their report to convince the careful reader that no one of these groups could be taken as a substitute for any other, and that no one of these groups could be spared from a symmetrical whole without destroying the pupil's view of the world. * * * It would have needed no additional argument to arrive at the conclusion that if there are five coordinate groups, neither one of which can be a substitute for the other and each of which is essential to the child's symmetrical view of the world, a concentration which subordinated one or more of these groups to another would do violence to the child's culture."

Dr. White bases his notion of isolation explicitly upon Dr. Harris's five coordinate groups and says "Coordinate entities can not be unified on the principle of subordination." The whole argument for isolation rests upon this idea of the isolation of coordinate groups and the opposition to concentration rests upon the same idea.

We will now examine the five coordinate groups of Dr. Harris to see whether they are really the basis of the present isolation of studies in the common schools. In his Jacksonville paper Dr. Harris names the five groups as follows: "1. Mathematics and physics; 2. Biology, including chiefly the plant and animal; 3. Literature and art, including chiefly the study of literary works of art, 4. Grammar and the technical and scientific study of language, leading to such branches as logic and psychology; 5. History and the study of sociological, political, and social institutions."

A close examination of our present school studies will show how extremely difficult it is to isolate them into these five distinct groups. The second group, for example, under the head of biology, as Dr. Harris says, "includes whatever is organic in nature—especially the studies relating to the plant and the animal—the growth of material for food and clothing, and in a large measure for means of transportation and culture. This study of the organic phase of nature forms a great portion of the branch of study known as geography in the elementary school." Geography therefore belongs to this group, but not the whole of geography. Geography of course includes several things not involved in the principle of biology. There is mathematical geography, there is political geography, there are the industries and occupations of men belonging to history and sociology and economics, an entirely separate group. It needs no further proof to show that the subject, known as geography, draws its constituent materials from at least three of Dr. Harris's coordinate groups, biology, mathematics, and history. On what principle, therefore, can Dr. White isolate geography when the very study itself is made up of materials drawn, in tolerably equal proportions, from three of Dr. White's isolated groups? Isolation on the basis of coordinate groups is not illustrated by geography.

In discussing his second group, Dr. Harris recognizes this composite character of geography saying: "Geography

takes up also some of the topics that belong to the mathematical or quantitative view of nature, but it takes them up into a new combination with a view to show how they are related to organic life, to creating and supplying the needs of the plant, animal, and man. There is, it is true, a 'concentration' in this respect that the mathematical or quantitative appears in geography as subordinated to the principal of organic life."

Theoretically, it may be possible to conceive of mathematical geography as subordinated to the principle of biology: but in practice, as illustrated by nearly all our books, mathematical geography is an important independent topic, standing at the beginning of the book. If subordinated, it would come in incidental to important topics in biology. As illustrated in our texts it is easier to see the dependence of biology upon mathematical geography than the reverse. Of all studies geography is the one which the advocates of isolation should shun. The effort to pull it up by the roots and isolate it is almost as destructive of life processes as vivisection.

Moreover, Dr. Harris's second group, biology, includes botany and zoology, two subjects which have been heretofore isolated from each other in the schools and also isolated from geography. Even in our course in nature study. now introduced into many schools, there is no effort to merge geography and natural science into one study, except possibly in primary grades. Dr. White's theory would call for a unification of these studies in a single core because they all belong to one of the coordinate groups. This is, however, impracticable on the ground that nature study and geography for example should be taught in distinct periods in intermediate and grammar grades. Dr. White says. "If two branches are taught in separate exercises, each having its appropriate and special development, they are not unified in any true pedagogical sense. For the purposes of instruction they are isolated." Again, "There is necessarily a close relation between subjects in the same group and their union at different points in instruction may as a consequence, be both feasible and desirable, but the

unifying of coordinate branches is a different matter." If unification means anything in Dr. White's paper, it means the amalgamation of two or more studies into one. This shows that his own strict principle of unification makes it impossible to teach properly subjects belonging to the same group. Our contention, on the contrary, is that concentration of studies does not involve amalgamation of studies either in the same or in different coordinate groups. The trouble with Dr. White's notion of unification, from my standpoint, is, that it doesn't work at all between coordinate groups, and has entirely too much effect in its amalgamating influence upon the studies of the same coordinate group. In overstating the idea of unification so as to show its absurdity and thus throw discredit upon concentration, Dr. White has conceived a form of unification that will not work anywhere, not even when it is needed in his own plan.

The second fundamental objection raised by Dr. White against that interrelation of studies known by the name of concentration, is that it destroys the sequence that belongs to each of the coordinate studies. This sequence is looked upon as the backbone of such a study as geography or arithmetic, history, etc. Dr. White says: "In such a unification of subjects the principle of sequence or development of the central or core study necessarily dominates the entire group and the proper development of each subordinate study is sacrificed." Again, "But the obvious principle, that underlies, not only courses of study, but methods of teaching, is the fact that every coordinate branch of study has its own natural sequence and development requiring its isolation and separate treatment."

Is this sequence, then, in the common school studies, a thing of such profound importance as to serve as such a fundamental canon of faith in the construction of our course of study? This subject was quite freely discussed in the first Year Book in the article on Concentration, Sec. VII p 54, etc. The argument will be briefly stated here. Perhaps the most important study in the common school is reading. But no two readers or sets of readers have the same sequence of thought materials, nor even of words. It

takes but a moment's consideration to see that, considered as a body of scientific truth, there is no necessary sequence at all in the reading matter of the grades. The sequence, therefore, which Dr. White is guarding with such zealous care does not exist at all in the reading materials, and a closer interrelation between reading, history, geography, natural science, etc., need not be obstructed by this paralyzing fear of disturbing the sequence.

Language lessons also, considered as a series of exercises for the first six grades in acquiring the mastery of oral and written language, have almost no scientific order or sequence and no two sets of language lessons follow the same sequence. In seventh and eighth grades, as grammar in its logical system and order is taken up, something of a general sequence must be followed, although the illustrative materials may vary greatly (from which grammar is inductively developed.)

Geography was once supposed to have a sequence in the common school course. But there is no subject now upon which thoughtful teachers and progressive schools are more unsettled and more at variance than upon the question as to what is the true sequence in geographical topics. Many teachers think it best to begin with home geography and move out into the world from this center. If this view is correct, it implies infinite variety in the sequence of geographical subjects in different schools, cities, etc.

Geography as it now enters into school courses is not a science nor even a collection of sciences but rather a collection of composite topics, each of which draws its materials from nature and man's realm (natural science and history). Disregarding the relations of geography to other branches and to the child's needs, and looking upon it simply as a body of materials for classification, we should have great difficulty in finding the best sequence of important topics. But on account of its composite character, geography is recognized as having the greatest variety of important relations to other parts of the curriculum. In view of this lack of necessary sequence in geographical topics, and with this strong body of relations to other studies, is it

a rational proceeding to make out an entirely isolated course of study in geography (on the basis of a supposed sequence) while disregarding all those vital relations in which geography may be helpful to other studies?

History once followed the chronological sequence, beginning with Columbus or the Norsemen. But, in many schools of late this invariable sequence has been broken into, and we now begin in many cases with local history, stories of our home state or neighborhood. It seems to me that in the future chronology will play but a secondary part in the history course of our American schools in the fourth, fifth, and sixth grades, and even in the seventh and eighth grades it will be much less controlling than heretofore.

Natural Science studies in the common schools have not yet been brought into anything like uniformity of plan and sequence. It is supposed to be one of the faults of our course of study today that no well arranged series of topics running through the grades, has yet been laid out. In view of the many difficulties surrounding this subject, it is doubtful whether any strict scientific sequence can ever be established in the eight grades. In fact, a pedagogical rather than a scientific sequence seems to be desirable, which will be determined largely but not wholly by the relation of the sciences to the other studies.

The real bulwark of those who believe in scientific sequence is arithmetic. It has been looked upon as an example of absolute and invariable sequence. Even this, however, is a matter of faith, to a considerable extent, rather than of insight. The order of topics even in arithmetic will bear considerable variation. It must be confessed, however, that few, if any, have yet discovered the means by which arithmetic can be extensively correlated with the other studies.

Taken as a whole, the separate studies, as they present themselves in the school course today, are not sciences; they are not systematic scientific bodies of knowledge. Moreover, it has become a recognized principle in pedagogy that the scientific order in the method of treating topics is not the pedagogical order. Dr. Frank McMurry

says (First Year Book, p. 60): "But even if they were highly developed sciences, the logical order of their unfolding is not in accordance with the law of apperception, and hence must be rejected as the principle of their sequence."

The isolation that has long prevailed in our school studies has helped to fix the traditional belief that it had a substantial basis in this important sequence of topics in each study. But an analytic examination of the materials of our common school studies will show that this reputed sequence in some cases does not exist and in others is capable, without injury, of great modification.

Finally, it may be observed in the five coordinate groups named by Dr. Harris, that we have a theoretical and philosophical, rather than a practical, division of studies, The actual studies in our present school course pay little or no attention to these divisional lines by Dr. Harris. Some of the studies lie in two or more divisions, as we have already shown; for example, geography, nature study, reading, language, and drawing. Dr. Harris himself shows very clearly (pp. 327-328 of "Five Coordinate Groups of Studies," Educational Review, April, 1896,) that drawing falls in three, if not four, of these groups. It would be difficult, if not impossible, for Dr. Harris to show that the school studies could be practically isolated into the five groups which he has mentioned. So far as we can see at present, we have no objection to Dr. Harris's fivefold division of studies. It is probably the best philosophical analysis of the materials of the school studies that we have yet had. Some of Dr. Harris's friends claim that it is his great merit to have discovered these five fundamental philosophical elements or categories of human thought and culture, but the very fact that it took a great mind to discover them is proof that this fivefold division had not made itself apparent to the common eye. If these five groups of studies had stood out in such isolation as Dr. White attributes to them, Dr. Harris's discovery would have been a truism long ago. The fact is that these five groups of culture material lie so bedded together and interrelated that it took the eye of a philosopher to untangle them and set them forth in this theoretical isolation.

The central point of this controversy between Dr. White and the Herbartians is the question of the relative importance of isolation and unification, as principles involved in a course of study. Dr. White expresses his conviction as follows: "It thus appears that isolation is the dominating principle in a true course of study, unification having its place and function chiefly in the processes of instruction."

It seems to me surprising that one should look upon isolation of studies as the great fundamental principle of the school course, and especially that one should regard it as more fundamental and comprehensive in laying out the school course than the principle of unification itself. (The term unification being used in its generally accepted sense.) The arguments in favor of the closest possible interrelation of all the studies and experiences of a child, are so strong and so numerous as to render unification not incidental or secondary to instruction, but a cardinal principle of arrangement in the school course.

If there is one dominant aim in education, then the school studies should be combined and focused in the direction of that aim. If all the studies and exercises of the school should have an ethical center, that is, should tend toward the strengthening of ethical principles as the central stronghold of a child's character, then closer nexus and interretation instead of isolation are demanded, and isolation is valuable only as it contributes to ultimate unity.

If the ego, the soul, is built on the principle of unity, then the absolute isolation of the soul's knowledge into parts, means injury if not destruction.

It seems hardly necessary to call the attention of the psychologist to the laws of association as the natural paths and highways of the mind's activities tending always toward unity; of the fact that all study is a study of relations, if insight is reached; that mental assimilation is association, organization of knowledge, synthesis, and especially a tracing of causal relations, which are cross-roads between the sciences.

The personality has no existence apart from the presupposition of the unity of thought; that is, of a single consciousness, that runs like a thread through the whole of a child's varied experiences.

These theoretical arguments, based upon the nature of the soul and of mental action and assimilation, and of the ethical purpose which for character building still further demands unity,—these theoretical arguments are supported by equally strong reasons drawn from the field of studies and from the world of practical life.

An examination of the school studies themselves will show that the relations between different studies are, in very many cases, more important and significant than the relations between the different parts of the same science. This does not mean that we propose to mix and confuse the studies. We believe in the isolation, for purposes of instruction, of every important study, as has been already shown; but we believe also that every important topic in any study should be seen in its natural relations to topics in other studies, thus binding the studies together in a multitude of close inter relations. It has been assumed by those opposed to a close binding together of all the studies that the important relations are not between the different studies but between the parts of any one study. If, however, we will select any important topic in botany, history, geography, and even arithmetic, and give it a genuine pedagogical treatment, we shall find that the roots of such a topic almost invariably reach out into the other sciences and establish those life connections which are the very essence of good instruction.

In the study of the apple tree in botany classes, on the principle of isolation it has been customary to make an examination of the blossom and to note sufficient comparisons with other members of the rose family as to trace it out and classify it in this group of plants (Rosaceae). The purpose of such a study of botany is to get a knowledge of the leading classes of plants as artificially isolated from the rest of nature. This process of isolation is totally inadequate to a pedagogical study of trees and plants. In my judgment

a proper study of the apple tree as a type of vegetation would include such topics as follows: the apple-seedling, grafting, the roots in relation to soil and moisture, the functions of the bark, sap, and woody fiber, the dangers to the tree and fruit from cold, frost, rabbits, insects, influence of sunlight and climate; comparison of the apple tree with other fruit trees and plants: the influence of cultivation upon apples, wild apples, uses of the apple.

The treatment of the apple tree in this manner would involve the time of several lessons, running through several weeks, with observations, excursions, etc. It would reach deep into the subject of plant life and growth, and turn up new soil in every lesson. It is certain that questions would be raised involving the relation of the tree to geology, chemistry, physical geography, sunlight, and zoology, and the relations touched upon would be vital relations to these subjects.

The apple tree certainly sends its roots and branches into three or four of Dr. Harris's coordinate groups. The roots draw their moisture out of the soil and are particularly adapted to this purpose (geology) but the leaves also absorb from the air and from the sunlight life giving elements (physics and chemistry.) The frost and noxious insects threaten the life and fruitfulness of the tree, (zoology and physics). The tree grows and flourishes and keeps up its life processes hemmed in and vitalized by this environment of other sciences. Moreover, genuine instruction can never ignore these vital causal relations which exist between topics of different sciences. It is necessary to call attention here to the fact that such a topic as the apple tree, handled in the manner suggested, is a strictly botannical topic and does not purpose to teach geology, zoology, physics, or chemistry.

The purpose is to understand the tree and its life and its utilities, but this is impossible, without tracing the close connections of the soil, sunlight, insect, etc., to the tree. A tree can no more be understood in its life processes when isolated as a botanical specimen than a man can be appreciated in his character and influence isolated

from society. It is apparent that the purely botanical treatment of the apple tree is largely artifical, ignoring life relations while emphasizing botanical classifications.

It is bardly necessary to multiply illustrations to show that almost every important topic in zoology or botany, if treated properly, would illustrate equally well our proposition that the relations between topics in different studies are very often more important and significant than the relations between different parts of the same science. In geography and history, I think this proposition may be maintained with equal force. Nearly every important topic in geography has its roots in history and the natural sciences.

The treatment of the falls of Minneapolis, for example, would bring in by way of necessary explanation the rock strata and the cañon below the falls (geology): the mills and turbine wheels (physics); saw-mills and pineries (pine trees); the early history (Indians and Hennepin); besides the strict geographical relations of commerce, railroads, Minneapolis, etc.

Again, we say that a mixing of studies is not implied but an understanding of one topic in one study in its relations. In none of these cases is it expected that a full treatment is given to any simply related topic. It may be remarked here, however, that skillful teaching is required in the treatment of such topics in order to avoid the mixing and confusing of studies. This is one of the dangers necessarily incident to a proper interrelation of studies.

Such studies as history, the natural sciences, and geography have everywhere these deep, vital, and multifarious interrelations. Reading, considered as masterpieces of human thought, belongs also to this group. But reading as an art, language lessons, writing, drawing, and some of arithmetic, stand in a different relation to the first named studies. We have shown that language lessons in the first five or six grades have no scientific unity. They are simply exercises in written and oral expression for the purpose of forming right habits with a few incidental rules and classes. The thought materials for language lessons are best drawn

from bistory, natural science, or geography. Reading, language lessons, writing and spelling, have been sometimes called formal studies, as distinguished from content studies. Without entering into any dispute as to the relation of form to thought, it is still clear that what are ordinarily recognized as the forms of reading, spelling, writing, and good English, require special drills. Not many teachers have yet reached the conclusion that reading, writing, and spelling can be properly mastered without special drill on the forms themselves. But in the common school the thought materials which must be brought into form are supplied by the other studies. This brings us to the extremely close relation that should subsist between geography, literature, history, and natural science on one side, and reading, writing, spelling, and language lessons on the other.

One of the strongest practical arguments in favor of a closer relation between studies is supplied by the relation of language lessons to other studies. Language lessons, as a separate study, are justified on the ground of their necessity as a means of acquiring correct forms or habits of oral and written language. On the one side language lessons need to draw their thought materials from geography. history, or natural science, because it is necessary to have abundant and interesting thought matter in order to secure free, abundant, and varied expression. On the other hand, language lessons, having laid their stress and drill upon certain language requirements, must depend upon the other studies to see that these language requirements are converted into permanent habit. Language drills will never cure the bad habits of children, unless the arithmetic. geography lesson, etc., insist upon the application and practice of those things drilled upon in the language lesson. It is entirely too much to expect that language lessons can overcome, with their brief drills, the faults which are passed over uncorrected in all the other exercises of the school. The fundamental principle here is that what is learned and drilled upon in one study is learned for the purpose of applying it in all other recitations and studies. If this is not true the thing learned is not worth learning.

Knowledge is for use, and it is hypocrisy and inconsistency to emphasize a thing as important in one study and then neglect it in all others. On this principle, therefore, language lessons are buttressed on two sides by the other studies; they draw their invigorating thought materials from the other studies and they depend also upon the other studies for making their drills finally and permanently efficient in the children's habits. No closer interrelation and interdependance between studies can be conceived than this and yet we are told that isolation is the main thing in these studies.

The argument therefore in favor of a much closer interrelation of studies is very strong viewed from the standpoint of the studies themselves. The clearer insight into meanings and the mutual helpfulness of the studies call for such emphasis of relations.

The final and conclusive reason, from the practical side, is that real life demands these interrelations. The isolation of studies is a thing not found in the world outside of the school room, and of scientific texts. Whether we look in the wilds of nature or in the midst of populous cities, we shall nowhere find things so beautifully ordered and classified and isolated as they are in the school room and in text books. Nature everywhere mixes and tangles the sciences. Man, in his practical arts and activities, does the same. Nature does not put all the butterflies in one field, all the birds in another, all the plants in another, and all the sunshine in another. In nature we find great life societies where all these forms and phases of organic life and inorganic matter are bound together by the closest and tightest causal bonds. The druggist in his store does not deal with simply one isolated science, the farmer must know plants and animals, weather and markets, machines and soils; the physician needs now a little sunshine in his heart, now a little medicine in his knapsack. It may be a case of bone fracture, or of mental abnormality with which he is suddenly called upon to deal. The druggist or the physician must first master each science in its scientific order and isolation, and there is no other road to mastery. But the application of scientific knowledge is always in a world where things are not scientifically ordered, and it generally takes as long to learn how to apply a science as it does to learn the science itself.

The great purpose of education, as generally admitted, is to prepare children for life. Non schola sed vita discimus. Now, if children learn only to recognize things in their scientific form and isolation in the school room, how shall they be able to disentangle the actual relations of real life? Many of the things learned and classified in the school coom are not recognized when seen by children in the relations of life. But while studies are very closely mingled and interdependent, in life they are not isolated. Why should the school tear asunder and leave in isolation those things which in the common experiences of men are bound together by many important and vital links of connection? We repeat, scientific, thoroughly organized and classified knowledge is indispensable, but it is never the goal to be set up for the studies of the school course. It is only a half-way station on the road to real knowledge and interpretation of life.

The criticism certain to be raised against us is that we fail to recognize the value of scientific knowledge. Our purpose, however, is not to question its value, but to discover its true importance and to lay proper stress upon the application and use of knowledge. It goes without saving that a large share of the knowledge gained in schools finds no application in life. The reason for this is not so much that the knowledge gained is worthless, as that it has not been organized and thought out in those relations that correspond to the usual conditions of life. Knowledge is power only when it can be turned to interpretive use, not simply in the class room but under the conditions and pressure of life's experience. A close organization and practical interrelation of all the phases of school knowledge and of life experience is the only thing that can give a person a ready command of his resources. Many so-called educated people have never reached this stage of communication and contact between school and life. They have learned many facts and sciences in their artificial book or school connections, but have failed to see these facts in their actual connections in the more important concerns of life. This produces a halting and helpless attitude toward life's problems.

In this discussion of relations between studies and of the closer linking together of all a child's ideas and experiences some important problems in *child study* will have to be solved before the argument can rest on safe grounds.

Is it within the range of healthy child-thought to associate ideas in different studies and to see the value of the connections? Have children the capacity and the disposition to relate ideas, to think? The answer to this question lies with those who know and appreciate children best, who have watched them judiciously in their studies and voluntary employments. In the decision of this question teachers can afford to weigh their own experience as well as the testimony of authorities.

Take children from intermediate or grammar grades. what kind of study in geography or history, or natural science puts them to their best thinking and self activity? Are they predominantly receptive, simply accumulating the materials of thought for later use or are children thinkers. There is a strong disposition now among some teachers and among psychologists to look upon boys and girls as exhibiting from childhood up all the essential phases of mental activity. There is very little doubt, for example, that children do some excellent reasoning and thinking before they enter school at six. It is a conviction with many that school children are not only capable of exercising a rational judgment and thought power, but that the very life of instruction depends primarily upon this thoughtstimulating process. To simply learn and stow away facts is a dull and burdensome employment, but to look for reasons, to see and understand necessary connections, to discover resemblances, important associations and laws, is the very relish of knowledge-gaining. Intelligent boys and girls are no more satisfied with simply learing facts than intelligent men and women are. Children learn to think.

under normal conditions, about as fast as they accumulate the materials of thought.

And yet in such a discussion dogmatism is all out of place, for the world can no longer be imposed upon by anybody's dogmas. The children are ever present with us. Thousands of teachers and parents are at work upon the materials at first hand, and every thoughtful teacher must in the end decide the question for himself.

Are teachers undertaking too much when they assume to train children to think? At the best, teachers can only supply the favorable conditions for mental activity in children. Those opposed to the emphasis we place upon correlation and concentration stand in fear of an artificial effort of teachers to portion out and mingle the ingredients of study, or what Dr. White calls "the philosophic mixing of the materials of instruction in the mind's hopper." But we do not propose the impossible task of doing a child's thinking for him. He must eat his own food and digest it according to his own capacity. The process by which a child accumulates and assimilates the materials of knowledge must be his own process of thought,

The function of the teacher is to provide the suitable materials and to render the conditions as favorable as possible to the child's exercise of his own mental forces. The teacher is at best only a careful, judicious supervisor of a natural process. And yet it will be generally acknowledged that the kind of thinking done by the children will depend chiefly upon the teacher's plan of arranging and handling the materials. The purpose of the teacher's plan and method is to engender self-activity, to throw a child upon his own resources in accumulating and interpreting knowledge and experience. These phrases about selfactivity are easy and cheap. But what do they stand for in our work with children? How are they to become open eyed, clear-headed, and self-reliant as they meet and absorb the experiences of school and home? Is the education of children chiefly dogmatic on the part of teachers and receptive on the part of children, or is it a process of thought stimulation and invigorating self-activity? There is no way of avoiding the plain issue that has been raised. Thinking relations between studies, the broader survey of every topic handled in every study in its relation north and south, east and west, up and down—all this means more self-activity, more rational self help, or it means nothing. Those who object to closer correlation or interrelation of studies are obstructing this thought-work and self-activity in children. The natural tendency of all school systems is toward formalism, mechanism, and routine. The effort to rationalize and vitalize the work of teachers to arouse thoughtfulness and self-activity in children always meets with violent obstruction. It is just this kind of propaganda that the advocates of correlation stand for.

It will be well to note here the standpoint of eminent writers and thinkers as to what may be expected of children in the way of thought and mental assimilation.

In a paper before the National Educational Association at St. Paul, in 1890 entitled, "The Essential Differences of Elementary and Higher Instruction." Dr. Harris says: "Higher instruction differs from lower instruction chiefly in this: Lower instruction concerns to a greater extent the mere inventory of things and events, and has less to do with inquiring into the unity of those things and events. Higher instruction deals more with the relation of things and events. It investigates the dependence of one phase upon another, and it deals especially with the practical relation of all species of knowledge to man as individual and as social whole." * * *

"Not a mere inventory, not a collection or heap of mere information, is demanded of the university students; not even the systematization of the facts and events inventoried, the mere classification or arrangement such as is done by secondary instruction, will suffice for the university. It demands profound reflection; it insists that the pupil shall see each branch in the light of the whole. It directs him to the unity underlying and making possible the classifications and systems as well as the inventory of the details themselves. It seeks as its highest aim in its instruction to give insight to the mind of the student."

This passage from Dr. Harris is disappointing to those who believe that children are thinkers as well as accumulators of data. It would probably be unfair to emphasize the implied discredit to thought work and insight, in elementary schools. Dr. Harris is here setting out prominently that broader philosophic insight and interrelation of studies to which elementary schools can lay but little claim. The more important question for us is whether there is a close practical interrelation and interdependence of studies entirely within the compass of the child's mental activities. The whole temper and tendency of modern progressive education demands for children food which they can assimilate, and not simply accumulation of data. Practical understanding of relations and insight are just as much called for in elementary as in higher education. The mental constitution of children and the very life of instruction as adapted to foster this, are constant witnesses in favor of thoughtfulness and rational survey of relations. The great German writer, Lessing, in his tractate on the use of the fable, says:

"Why is it in all sciences and arts there is such a dearth of inventive and self-reliant thinkers? This question is best answered with another. Why are we not better educated? God gives us a soul, but genius (clear thinking) we must acquire through education. A boy whose entire mental powers are developed and broadened out in due proportion, who is taught rapidly to compare all that he adds today to his little store of knowledge with what he already learned yesterday, and is on the lookout to see whether by this comparison he does not arrive at things for homself not told him before; who is permitted constantly to glance over from one science into another; who is taught to rise just as easily from the particular to the general, as to descend from the general to the particular -this boy will become a genius (a clear thinker) or one cannot become anything at all in the world."

This passage from Lessing is an emphatic demand for the exercise of thought power in children. It is an unequivocal and absolute call for mental alertness and originality and many-sided survey of knowledge as fast as it accumulates. So far from being satisfied with mere inventories in elementary instruction, it leaps at once to the more important demand for elaboration of knowledge in self-active effort. It is a plain demand for constant thoughtfulness and survey, glancing ever from study to study, from school to life, from particular to general, and vice versa. It calls for intelligent assimilation of ideas at every stage of progress.

Dr. White calls in question the necessity for this careful provision by the teacher for mental assimilation for varied and thoughtful associations by children. He says:

"One more observation seems a fitting conclusion to this study. It does not follow that facts taught separately remain isolated in the pupil's thought. The mind is endowed with the power of assimilation and unification, and this power is more fundamental in education than is dreamed of by some philosophers." This passage makes it clear that Dr. White is not afraid of too much isolation of studies. If children have six or seven totally distinct and unrelated exercises in a given day, he is willing to trust the children to think out the connections. Herbart says: "In consideration of the unmediated jumbling together of thought masses as a condition common to anomalous mental states, I can not refrain from wondering what sort of a process is being worked out in the heads of schoolboys, who in a single forenoon are driven through a series of heterogeneous lessons, each one of which, on the following day, at the regular tap of the bell, is repeated and continued.

"Is it expected that these boys will bring into relation with one another and with the thoughts of the play-ground the different threads of thought there spun? There are educators and teachers who, with marvelous confidence, presuppose just this and in consequence trouble themselves no further."

Here is an unmistakable direct issue between those who think that children will learn to do their own thinking without aid from teachers, and those who believe that it is one of the noblest functions of the teacher to train children to be thoughtful. These passages from Dr. White and Herbart are the witness of opposing standpoints on a vital question in education. The one emphasizes isolation and gives sanction to the present unconnectedness of studies, the other lays the stress upon relations, and seeks to enlarge the range of a child's thoughtfulness and rational survey, his self-activity and insight, by so planning and laying out the course of study that the sciences everywhere may be brought into more vital juxtaposition.

This is the issue that hes clearly before us in the entire discussion. Shall we be satisfied with the present isolation of studies and with a theory which defends it and rejects all propositions to lay out the school course on closer lines of agreement and interrelations, or shall we listen to those who seek everywhere for closer adjustments and vital connections between the studies, who believe that children have a healthy capacity for thought, and that character in every child is strengthened by proper assimilation and organization of the materials of instruction.

We can not better close this part of the discussion than by a quotation from Wilmann in the preface to his Paedagogische Vortræge: "In another place I have expressed the opinion that I consider Herbart's foundation of the theory of education, as in need of modification. But at the same time I gave expression to the conviction, that in spite of this the working out of the system of didactics founded by Herbart, and still further developed by Ziller, remains highly fruitful for our system of schools. The importance of this didactic lies chiefly in this, that it places at the fulcrum a problem whose solution becomes every day more imperative, namely, the question, how the wealth of an aroused and many-sided mental life may be combined with the solidity of a nature strong in character and rooted in morality. Herbart undertakes the problem of reconciling knowledge with will, the multiplicity of material with the unity of conactousness. He finds in the notions of interest, of sympathy, of attention, of the circle of thought, of developing maxims, a series of stations along the road from knowledge to will. He seeks to work over into unity this given multiplicity, without sacrificing any part of its content.

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"He seeks to do this by the change from absorption to reflection, by the union of analytic with synthetic instruction; that is, of instruction which brings order into the circle of thought with that which expands and enlarges it. He further seeks to bring about this unity by the introduction of great and wide-branching materials, and lastly by the requirement that all the connecting links between the matter of instruction, all the grooves of knowledge, all the roads and paths of inner association shall be carefully looked to."

Instead, therefore, of setting up isolation as the fundamental principle of the school course, and of relegating the principle of unity to the arts of the teacher, incidental to instruction, I believe that they are two principles of coordinate value both in the planning or projecting of the school course and in all the processes of instruction. Like analysis and synthesis, though apparently opposite, they are always inseparably linked together. They are reciprocals or correlatives. One of them can never stand alone, but each contributes what the other cannot supply. In mental operations the mind swings with a shuttle-like movement from one to the other, weaving the fabric of thought into a strong, durable, and firmly knit texture.

Before closing I wish to call attention to a few of the current criticisms and inherent difficulties involved in the effort to bring the school studies into closer bonds of connection. These points are added not as relating directly to Dr. White's paper, but as pertinent to the subject in general and of great practical importance.

1. A common criticism against concentration, as it shows itself in practice, is that it destroys the logical order and systematic connection of ideas in any given study. Teachers have been laboring for many years to reduce each study to a well-arranged and connected body of ideas as in grammar and arithmetic. Concentration, however, cuts across lots so much in getting from one study to another that all well-arranged plans of studying each subject are disconcerted. In reply to this it may be said that since concentration emphasizes relations at every step it is not

probable that it will neglect any important relations and sequences that are appropriate to the treatment of any study. In fact, this emphasis of relations in the parts of knowledge is likely to preserve all those valuable sequences and connections that have thus far been worked out in the studies.

2. The proposition to interrelate studies on a systematic plan threatens surely to mix and mingle the studies when they ought to be kept apart. Confusion will be produced in some cases so that we are no longer certain where any one thing ought to be taught, and in some instances three or four studies may be invaded by the class in a single recitation.

This danger is a natural and inevitable one in any plan of closer, more organic linking together of studies. The moment we begin to emphasize relations, we are threatened with excess in this direction. In tracing out the relation of a topic in one study to topics in other studies there is danger of following the relation too far, and of losing one's center of thought in the original topic. But the presence of such a danger suggests the caution to avoid it. This suggests our third difficulty.

- 3. It requires greater skill, knowledge, and thoughtful bess in the teacher to treat topics in their relations. She must have a wider and deeper range of knowledge of many studies and what is a still greater requirement, she must be thoughtful, judicious, well balanced. She must know the difference between the center and the periphery of a topic. She must know how to utilize the relevant materials supplied by other studies and yet not be carried away by their introduction. This is, of course, setting up a high standard for teachers, and if we propose to introduce a stronger correlation of studies we shall certainly need a stronger body of well equipped teachers. Many bad mistakes will be made by teachers who are in love with correlation without knowing just what it means.
- 4 Many teachers are thinking of correlation in a formal or superficial way—If, for example, the camel is treated best as an animal in natural history and a language lesson

be worked out of it, a composition be written and then read in the class as a reading lesson, and spelling words be selected from the narrative, while drawing and writing are exercised upon the same subject, teachers are inclined to think they have a striking illustration of concentration. In reality we have but one subject before us, an object in natural science. The language, reading, writing, and composition exercises connected with it are only the arbitrary forms and symbols by which the facts about the camel are expressed. There is little or no connection established between different bodies of ideas in different subjects. This kind of relation between studies is important and of frequent service but it is only one phase of correlation and that a somewhat superficial one.

Now, if Indian corn were studied first as a commercial product in geography, then as a botanical specimen, also as related to the history of the Puritans at Plymouth, and of La Salle and the early explorers in Illinois, and finally as described in the Indian Tradition of Mondamin in Hiawatha, we should bring the subject of Indian corn into close and real connection with three important realms of knowledge besides geography. The forms of expression in drawing, writing, and reading might be added. This is the deeper kind of correlation.

The kind of correlation that we have been chiefly emphasizing is this deeper root connection of any important topic with other topics in the same and in other studies. It is the opposite of superficial. It is the tracing of deeper cross-connections between the sciences. Those, therefore, who accuse the Herbartian pedagogy at this point of emphasizing superficial and accidental relations, do not yet appreciate the meaning of this movement. The more appropriate criticism here would be that we are in danger of going too deep, and are calling for too much exercise of thought in teachers and pupils.

5. The doctrine of formal discipline which emphasizes the mental habits and strength acquired by study rather than the content of well organized knowledge, would seriously impair the theory of concentration or of correlation.

forrelation seeks to increase power by building up in the mind well associated and organized bodies of thought, and to bring the whole body of experiences and knowledge into a network of strong associations. Power and efficiency and strength of character depend upon this organized knowledge. The theory of discipline is that the knowledge may perish but the power gained through discipline remains.

6. Perhaps the chief criticism against the theory known by the name of concentration is that it calls for one central study and subordinates other studies to this center. For one, I have not yet accepted this proposition, illustrated and applied to the school course by Ziller and his disoples. There is indeed one argument in favor of this theory that has always appealed to me with much force. It is involved in the notion that the highest controlling influence in education is ethical, and as history and literature present us the choicest form of ethical culture, these studies have a certain superiority in the sisterhood of studies. This, however, is a disputed point and can not be further brated here. It has seemed to me that even upon the basis of coordinate groups of studies, like those suggested Dr. Harris, this dominancy of the ethical element in edu-Cation might be secured.

DR. WHITE'S REPLY.

I gratefully acknowledge the high compliment involved in the publication of my Jacksonville paper in the Herbartian Year-Book, and especially in making it the basis of a discussion not only in the Year-Book, but at the coming meeting of the National Herbart Society. I regret that I cannot be present and participate in the discussion.

I also much regret that Dr. McMurry's formal review of the paper reaches me when I can give it little attention. I have read it somewhat hastily, making a few notes, and have only time to add in reply a few brief paragraphs.

- 1. The reading of Dr. McMurry's review has left the impression that much of it lies outside of my paper. He has gone from the statements of the paper to related topics (the relation not always obvious), and has thus surveyed the whole field of recent discussion. Is this to be taken as a practical illustration of the theory of concentration which he so earnestly advocates?
- 2. All the arguments and illustrations in the review clearly have reference to elementary instruction—the teaching of the elements of knowledge, and largely in the first four or six years of school. Both my paper and the outline included in it clearly recognizes that unification has an important place in elementary instruction. But school life, including the college, covers a period of sixteen years. Taking the school course as a whole, the isolation of studies for the purposes of instruction, is the dominating principle. It does not follow because the facts learned by children in the nursery, the kindergarten, and the primary school are not reduced to a science with scientific sequence; that the coordinate groups of human knowledge in their development have no such sequence. The review fails to take a complete and comprehensive view of school train-

mg a view that includes the high school and the college, as well as the kindergarten and the primary school.

3. Dr. McMurry concedes that there is to be "no mixag of studies in recitations." In actual class instruction, each study is to be isolated, "everything else being inciental and secondary." His statements on this point are car, strong, and satisfactory—a full concession of the potion taken in my paper. He also frankly confesses that the mixing and confusing of studies in class exercises is one of the dangers necessarily incident to a proper interrelation of studies." It is more than a danger, it is a sure consequence of the attempt by nine-tenths of our teachers to teach all studies around a central core. Let it be understood that the subject matter of every class exercise is to a unit, with proper sequence, and much bad teaching all be avoided. But while Dr. McMurry so strongly emphasizes the necessity of isolation in teaching subjects, he throws wide open the door for "mixing" when he touches spon his pet theory of teaching every fact in its relations to buts in other brunches. How, for example, can a teacher show pupils the relation of a known thing to an unknown that? To see this relation both things must be in the spul's mind. Hence in the same lesson, the facts to be reated must be taught or reviewed. It seems clear that the maching of the relations between coordinate studies, so strongly emphasized by Dr. McMurry, makes the isolation studies in class instruction impossible—an isolation which, he says, all the disciples of Herbart hold to be "a "" of good teaching. It is important and sometimes easy to teach the relations between the hets in separate branches, but the essential thing in good briching is to teach the relations of the facts in the same

4 Dr. McMurry gives three illustrations of his idea of backing subjects in their interrelations, to-wit: the Missoppi Valley, the Falls of Minneapolis, and the "apple tree"

The method of teaching presented in these illustrations was down in the high school and the college as a uni-

versal method, and it has only a limited place in the grammar school. It fails when applied to the teaching of mathematics, ancient or modern languages, or the teaching of any science as a science. It is not possible to give a pupil the mastery of even the elements of any science by such patchwork. It may have a limited application in elementary schools, where pupils are acquiring primary ideas, and, what is better, the power to acquire knowledge. My paper recognizes the value of unification in this field, if kept within proper limits.

- 5. The practical objection to this method of teaching is that it requires the teacher to know all related science and the pupils to be endowed with scientific ability and insight. It may be true that "the roots of every topic reach out into the other sciences," but what can the average teacher do in tracing these scientific relations, especially with young children as pupils? Only the more obvious relations can be shown to children. I believe that children think and even reason early, but it does not follow that they can think scientific and even philosophic relations. The scientific phase of mental growth lies above the primary school. Dr. DeGarmo has well said, "Simple associations of facts children can make, but they see no far-reaching unifying principles." I have recently witnessed nature lessons which presupposed that the pupils were somewhat familiar with physical science. Such instruction ends in the pupils repeating words—a sort of gadgrind process. Few teachers and fewer pupils are scientists or philosophers.
- 6. Dr. McMurry is wrong in treating my paper as a defense of the old régime of complete separation of studies with mechanical and memoriter methods of teaching. He seems to see but two alternatives—either complete unification or complete isolation, and since the paper rules out unification as the dominant principle of courses of study, he infers that it is a defense of complete isolation and the old régime. But the paper also rules out complete isolation and the old régime. It discloses a wide, practical area between these two extremes. It concedes that there are many fruitful interrelations between even coordinate

branches that should be recognized, not only in instruction, but in the arrangement of a course of study. Ten years ago I revised the course of study for a great city, and, while such revision was necessarily limited by what had already been done in the school, an earnest effort was made to put the several branches of study in sight relations to each other, to correlate them, and to secure more natural and rational methods of instruction, especially in the lower grades. The paper is not a defense of the old regime.

7. The term unification is not used in my report in the sense of "amalgamation." This word implies such a union as changes the nature of the things united, giving a new whole. Nor do I use the term in the sense of conglomeration, a term that aptly expresses the result of the mechanical mixing of facts in a school exercise. I use the term to express the process of putting facts in such relations to each other that they constitute a whole, a unit of knowledge.

8. It does not follow that the teacher should correlate and unify all the knowledge taught a child because the human mind has the power of assimilating and unifying knowledge. It is a question whether much of the attempted unification of knowledges in class instruction is not a hindrance to that natural correlation and assimilation which the mind does for itself with wider knowledge and experience. The philosophic mixing of facts in the mind's hopper does not necessarily secure actual assimilation. Nature teaches more wisely. But this is a subject that cannot be discussed in a paragraph.

A POINT OF DIFFERENCE BETWEEN RACE AND INDIVIDUAL DEVELOPMENT.

Illustrated by Reading, Writing, and Drawing.

BY DR. HERMAN T. LUKENS, OF CLARK UNIVERSITY.

In Prof. Barnes's study of children's drawings presented at the Educational Congress in Chicago, 1893, and afterward published in Dr. Hall's Pedagogical Seminary, he reports that he found that the courage to express ideas through drawing increases in California children until they are thirteen or fourteen years old and then steadily decreases. Other studies of children's drawings by Miss Koehler, Mrs. Maitland, O'Shea, and others, although less statistical and conclusive, still tend to confirm Barnes's point; and common observation of children has long since made it a familiar fact that in general, little children are freer to express themselves before the self-conscious period is reached. I have before me now several thousand drawings made by children of from one year old up to fifteen and sixteen years of age. Those made by the younger children are bold and sketchy, nowhere finished with much attention to detail or proportion. One characteristic picture by a girl between nine and ten was drawn to illustrate a story of an accident, as told by the teacher. While a milkman was loading churns at a railroad station, his horse became frightened, reared on his hind legs, backed, and threatened to demolish the milk-wagon and all its contents. The teacher described what she saw of the driver's efforts to master the horse, his being thrown down, the scattered milk cans, excited crowd, smashed wagon, and runaway horse. The picture drawn shows the railroad station, labelled "Park Station." A flag floats from the roof

with the name "Park" on it. A woman with outstretched arms stands in the doorway crying, "Help me!" There are faces at all the windows of the station, in the top story of which is a girl calling, "When can I get out?" A large sign, as high as the top of the second story eaves, is on the lawn with a notice on it, "Keep off the grass." The milkman himself lies flat on his back, his hat a few feet away, and under his feet is written, "O! my milk!" The milk cans Habeled "1 quart," "1 gallon milk," "1} gallons milk," "2 gallons milk,""24 gallons milk.") are scattered about with the milk flowing everywhere over the ground. A woman with her back to us is rushing off with arms extended, and below are the words, "I am getting my shoes dirty." Three other persons with arms extended at right angles to the body are shown, one calling out, "You'll be killed," and another shouting to "call the police." The horse, having run away, is not shown in the picture. This sort of sketching, characteristic of little children who express themselves freely, is the kind that the majority of the systematic courses in drawing systematically omit to make any account of, keeping to the straight line, triangle, square, cube, circle, and other symmetrical forms.

Let us enumerate the chief characteristics of this earlier period as contrasted with the later, more delineative, stage. (1) The child's drawing is fragmentary and cumulative; he does not think of the whole picture and draw all with reference to the general effect; but, on the contrary, each separate detail is added as it is thought of and many times even though inconsistent with other parts already drawn. For instance, an oval is drawn for the head, with perhaps two dots for eyes, and two more lines for nose and mouth. respectively. It then occurs to the young artist that there should be hair on the head, and he accordingly dabs it on with half a dozen strokes of his pencil. But now the head must also have a hat on; he accordingly draws the two lines necessary to represent this article. As a result you can see the hair through the hat and the outline of the skull through both. This makes what is called a diaphanous drawing. (2) Out of 13,000 faces, Prof. Barnes found that

his children drew full faces till they were about nine years old and after that the profiles much increased in number. This change comes at very different ages in different chil dren. It is of great theoretical interest since it seems to indicate a change in the attitude of the child's mind toward drawing. The full face is diagrammatic, showing the relation of all features to the best advantage, and is drawn from memory. When, however, the attempt is made to draw line for line from the object, the profile is by all odds the easiest and simplest. (3) The fragmentary, cumulative manner of drawing leads naturally to exaggeration of details, especially of those details in which the child is, for the moment, especially interested. This gives to nearly all children's drawings of this early period the air of grotesque caricature. Proportion and perspective are not properly attended to, sometimes intentionally, but more often owing to the incoherent manner in which the drawing is patched together. (4) These early drawings are decidedly more symbolic, schemagraphic, or semagraphic than the later ones. The term epideictic has also been suggested for them since they are indicative of the objects rather than portrayals of them. The striking resemblance of such drawings to the crude picture-writing of primitive man is the reason for giving them the same name, pictographs. Some would call them gesture-drawings. Teachers are more apt to speak of them as illustrative drawings, storydrawings, narrative-drawings, illustrated stories, or simply play-drawings, or scribble drawings. Contrasted with this sort of drawing, the later stage is delineative, aiming actually to portray the object as seen; the technique and its necessity are appreciated, and hence, what Barnes calls the grammar and rhetoric of drawing may at this later time profitably be begun.

In language work we should naturally expect somewhat similar stages. In the learning of oral language the early period is represented by baby talk, or what Prof. Sully calls the "la-la" period. The same fragmentary, cumulative incoherence is present in the child's use of language as later in his attempts at drawing. The very mis-

pronunciations exhibit also, in a way, similar features of grotesque caricature. In the learning of "read-writing," reading, with its natural accompaniment of printing and play-writing, is the early stage of the process, while penmanship, stenography, typewriting, inverted cipher-alphabets, (and perhaps foreign languages,) etc., come at the second stage. The school-boy and school-girl attempts at poetry, orations, and essays, their imitation of Macaulay, Webster, and Scott, show the corresponding first period in literature, followed by a second period in which individualities of style and literary taste are developed and command of language in a literary sense is acquired.

In history and science you have the child's love of nature and that most suggestive period of collecting manias, accompanied by what might not inaptly be called the cataloguing mania, followed later by the birth of a genuine scientific spirit and method of work.

In the mathematics the early period is represented by the counting habits, "eye geometry" love and appreciation of symmetry, (as in Kindergarten work, etc.,) the development of number-forms, alphabet-forms, chronology forms, etc. The second, more mature stage is characterized by interest in mathematical puzzles, development of individual ways of working problems, inventional geometry, mechanical drawing, etc.

Now, all of this reduced to one general formula would, of course, be simply that the first period is the time of crude, childish endeavor, followed by another stage when considerable skill has been acquired. When the child is about ten years of age so many activities are passing into the second stage that we might in a very general way say that this transition into the more creative and productive period with more individuality embodied in the work, corresponds with the change from childhood to boyhood and girlhood.

The period of crude, childish endeavor is preceded and accompanied by an environment of culture-material and adult-persons of a much higher stage of development than the child at that time has reached. He learns to speak

under the stimulus of ready-made language of highly developed character. He is early surrounded with picturebooks, photographs, paintings, art galleries, etc., and his first awkward attempts at drawing and mud-pie making are thereby called out. So, in all the other lines of activity mentioned above, culture products of a much higher order in science, art, industry, literature, etc., compose the environment of the child and appeal to his receptive and as similative powers directly, thus tending to hasten the development of this side of his nature at the expense of his productive powers. A recent English writer on education speaks of "the wondrous faculty of the youthful intellect which causes it to resemble a capacious carpet-bag, in the way in which it receives and retains whatever the instructor thinks fit to put into it." Hawthorne, in the preface to his "Wonderbook," tells us that "children possess an unestimated sensibility to whatever is deep or high in imagination or feeling."

Throughout life "a man's reach should exceed his grasp, or what's a heaven for?" All of us can understand language that we could not ourselves use; we can appreciate books that we could not ourselves write; we can enjoy and understand pictures and works of art that we could not produce; we can see, hear, and feel the miracles of science and of nature without being able to invent or discover them for ourselves.

It is, then, the sensory side of the child's nature that is first stimulated and roused; this induces a corresponding motor activity and thus, in a way, we have, as in imitation, the simple conditions of the reflex arc, the type of all nerve action. But since the receptive side of the child's nature is thus directly stimulated and hastened, whereas the productive, or, so to speak, motor side is not yet correspondingly developed, the development of the former is shifted earlier and there results in this way a corresponding separation in time of what would otherwise be synchronous. This shifting of the sensory, receptive development earlier than its correspondent motor development is characteristic of ontogeny, and it shows itself more especially of course

in the immature years. Preyer quotes Soltmann to the effect that the muscles of the newly born are like the wearied muscles of adults, and are peculiarly sluggish in the earliest period in great contrast to the vivacity of a later period.

Donaldson tells us that glands and muscles are of slower growth than the central nervous system. Indeed, it is still an unsolved problem whether the exercise of the nervous system "really causes an enlargement, as the exercise of glands and muscles can be shown to do." Vignal has shown that in the eighth month of fœtal life, the layer of small pyramids (supposed to be the sensory layer of the cortex) makes a sudden and extensive development far in advance of the layer of large pyramidal cells (the motor layer) as if in preparation for the extensive demands to be made upon it after birth. It is also a most significant fact that the whole cortex of the brain is sensory, while less than a third of it is also found to be sensory.

In these early years the activity induced on the motor side is immature; the child's impulse is satisfied by the activity itself, the product being worthless. It is the characteristic play-activity of childhood, which is performed for the sake of the activity itself, since the interest lies in the activity alone and not in the product apart from the activity. When the corresponding productive develment is later reached, the product itself becomes valuable, and then interest attaches to it. This sort of activity is what we call work as distinguished from play. If all the interest becomes absorbed by the product, and is thus withdrawn from the activity, we have drudgery, as Prof. Dewey in a previous article has already pointed out. In any particular play, as, for example, when children "play house," both work and play are mingled. When they want to build a fire they must collect wood and shavings; which is work, because here the product and not the activity itself is the end.

There are accordingly three well-defined stages in the growth and development of any line of activity.

1. Beginning with the period of almost pure receptivity and open-mouthed wonder and delight in the senses, the

child very soon, however, begins to react, and, as Froebel says, "to make the internal external." In most children, for instance, there is a more or less clearly marked period, lasting from a few weeks to several months, during which they understand nearly or quite all that is said to them but have not themselves begun yet to speak. Many of us have our growth along a good many lines of activity stopped at this stage, so that we are content to read and see and hear, but not produce. Of course, in these days of specialists, it is impossible for one individual to be productive along very many lines, and yet those who take as their watch-word, "education by doing," are certainly in the right when they say that receptive education is but the beginning and in itself is at best only half an education. It is besides the unproductive half, like the front half of a cow, doing all the eating but giving no milk.

Indeed we may well consider whether sometimes the best results are not to be obtained by making the educational environment appeal to the motor side of the child's nature, in order to counteract in part the otherwise too strong influence on the merely sensory side. Although precocious motor development is more dangerous than precocity on the sensory side, yet we must remember that even with all the motor training that we can give at the proper time, the sphere of motor activity will always be inadequate in comparison with the sensory sphere, and we shall therefore always be in danger of cramming with culture products instead of educating.

This first receptive stage is, however, of the greatest importance, since it is the golden time for starting up the growth of interests along the line of activity in question. Take, for instance, the case of reading. Most children learn to read either as a matter of course, or else, if they think of it at all, the only reason they can find is, "because other boys are learning." They have, as a rule, no chance to form any idea of what use reading is to be to them, be youd the very weak notion that they are able to pick up of themselves from seeing others read. Merely telling them the value of reading will not give them much idea. Now,

I believe that, aside from the valuable influence of literary and refined surroundings and sympathetic treatment of the child at home, a great deal can also be done by proper method in commencing the teaching, so as to open up to the child an appreciation of books and magazines. By this means can be developed in him a genuine desire to learn that will overcome all obstacles. A child who does not want to learn will take from five to ten times as long to learn to read as one who is eager. To start with this live interest and eager desire is of a hundred times more importance than it is whether you use the word method or the alphabet method. The usual way of beginning is to take such statements as "Willie has the book" and "the boy can see the girl," and then to have the children "make it true." It is then put on the board and drilled on in various ways. Now, it seems to me that such a way of starting is radically wrong because it artificially leaves out all the elements that make it worth while to learn to read. No child would want to learn for the sake of being able to read such idle sentences.

The teacher ought to read a good deal of wholesome and interesting material to the pupils in the kindergarten and the primary school and she ought to take pains to read well, with expression and appreciation. Then in beginning to teach reading let her take some story with the substance of which the pupils are already perfectly familiar (say a farry tale or a rhyme from Mother Goose), and use it for the first reading lesson. If this is done the children realize what reading is, viz., that it will enable them to get for themselves from books that sort of material. Ordinarily bright children will learn in this way with absolutely no further help than to answer some of their questions as to what this word or that word spells. Of course the various devices and methods are necessary with the slower and the duller pupils, but even that does not require the start to be made with such empty trash as "I see the boy," "the book is on the table," etc. From the first let it be material that the children will care to read. If it is matter already familiar to them, the difficulties of understanding and appreciating it are reduced to a minimum. The pupils can then give their whole attention to that part of the process that is new to them, viz., the visual symbols. This is the plan adopted in some schools, even for higher grades than mere beginners. (Cf. McMurry's Special Method for Reading, p. 82, 85, ff.)

II. When in this and other ways a good head of interest has been turned on, the second stage will be rich and abundant in eager attempts to imitate that which has aroused the activity. This is the great opportunity for suggestion and for indirect teaching, which is the best of all teaching.

It is also the time when characteristics of race development are perhaps most apt to crop out, owing to the plastic and as yet unsettled form of the reaction. In this way, as Thoreau remarked, the pursuits, (fishing, hunting, etc.,) of earlier generations, become the sports of later and more highly developed civilizations. It would seem plain that this period in the development of any activity is not the best for much drill work in that line. The drill should come later when the motor has overtaken the sensory development. Until then the activity is essentially a play activity and should be almost as free from restraint as play naturally is.

Play, we thus see, is in the individual development a necessary preparatory stage to work, and this view of it brings out its fundamental pedagogical importance. We should keep in mind the essential meaning of play, viz., activity for its own sake and therefore of the nature of amusement; because, being induced by interest from the sensory side, the imitatory reflex merely tends to complete its arc by the activity alone, no interest therefore attaching to the product. And so long as the motor expertness is not yet developed, the product can not acquire much, if any, value. The immature child, therefore, can only spend his time in play. So soon, however, as he becomes able, along any line of activity, to produce something that is valuable, c. g., to run errands, to carry in wood, to sell newspapers, etc., interest begins to attach itself to the product and the activity becomes work.

III. The third stage is therefore the stage for work, just as the second was the period for play. The characteristics of the third stage may perhaps be grouped as follows:
(I) Interest in the product as such. (2) The power of origination and creation. This, of course, goes along with (3) the development of voluntary muscular control and repression of automatisms in that particular activity. (4) Individuality in the product. If this be true, then individuality and originality have a tremendous pedagogical significance, for they mark the nascent periods for the development of the productive as distinguished from the merely receptive powers.

Applying these principles to reading and writing, we may begin reading as early as possible. The motor accompaniment will naturally be printing instead of script during the second period. But script will of course be forced as early as it can be on account of the cry for the three R's. Their advocates for the most part utterly ignore the fact that the sensory development is earlier than the motor, owing to the natural hastening influence of the environment. Then, besides, the fact that writing is such a convenient form of "busy-work" and of examination test is also a very strong reason for teaching writing as early as is possible without injury to the child. But a candid observation of the facts would lead one to agree with Rousseau, Compe, Graser, Scripture, and a host of other German and American teachers who, regarding only the child's normal development and noting the increasing nervousness, injury to the eyes, and poor writing combined, proclaim with emphasis that the normal nascent period for learning penmanship is from nine to thirteen, and not earlier.

Certainly this is the period when the hand-writing is acquiring its individuality and the writing habits are getting their set. Hence practice and drill on regularity of slant, uniformity of height and shading, and gracefulness of outline will now be most effective and lasting. Much better results would undoubtedly be secured if all the time assigned to penmanship in the sixth, seventh, eighth, and higher grades were concentrated in the fifth, so that this

fifth school year would thus become, in a way, the penmanship year. The result would be that facility and regularity would be mastered, and thereafter no further time would be necessary for it as a separate subject of the curriculum. To potter along with sixty minutes a week spread out through eight or nine years is to dissipate all interest and all lasting results in motor training. The Committee of Fifteen very wisely drop it out of the curriculum after the sixth grade, but, for reasons stated above, very unwisely assign the drill period in penmanship to the first and second school years instead of the fifth and sixth.

In the course in drawing the same three stages should no doubt be provided for. In kindergarten and primary school abundance of pictures and models should be at hand, and illustrations should be made use of in every subject. The children should have access to albums, magazines, picture-books, etc., should visit art galleries and museums, and take excursions into the open country for the beauties of nature. The movement for beautifying and adorning the schoolrooms with pictures, busts, tinting the walls, etc., and ornamenting the school grounds with trees and flowers, is a most practical measure. In every way we should seek to make the school life rich in these appeals to the child's receptive and appreciative powers, to open up the fountains of interest in art along every line.

Then comes the second, transitional play stage of imitation and suggestibility before the skill of hand, and the right attitude of mind for artistic production are developed. During this time, drawing seems properly merely a language for expressing ideas and should be so used in connection with all the other subjects of study. Diagrams, illustrated stories, and pictures of everything the children are interested in, will be the natural and pedagogical course as opposed to the "systematic" course, now so universal, and yet so out of place in the lower grades.

At about ten years of age, Barnes thinks, (and all the others who have made special studies of the subject seem to agree with him,) the child may with profit take up the technique of drawing, or its grammar and rhetoric, as he calls it.

If, now, we compare these three stages of individual development with the race development, so far as we can form an idea of the latter, we shall find a striking and very interesting point of difference. In the race development productive activity has advanced hand in hand with the receptive sensory development; for culture material could not be enjoyed and appreciated until it was produced, and even nature herself has developed along with man to some extent, so that even the beauties of natural phenomena have been evolved, more or less conjointly, with man's development. The important difference then lies in the fact that in phylogeny no such fore-shifting of the sensory development has occurred as we find in ontogeny. That throughout even the race development, the senses have had a wider reach and range than the motor reactions is doubtless true, but the race has been developed on its own culture product, and hence has been surrounded by an environment of the same grade as itself.

In the race development there is, therefore, no playperiod such as we find in individual development. In the race development the play activity, so far as it is to be found there at all, is of an entirely different kind, viz., the result of exuberance of motor ability over and above what is necessary for the support of the body with the necessaries of life; in other words, the result of euphoria and leisure. This surplus energy measures the force of push upward in the development of the race. Sometimes it shows itself in play activity and we can well say that true play activity has had a great deal to do with race development. yet this sort of play activity is not confined to any period but characterizes all of them. The other kind of play activity, bowever, such as is peculiar to individual development in its immature stages, has no trace in race development. The race plays as much to day as it ever did. The individual may have a play period in every line of activity and in childhood normally does. The time in a child's life when the play activities along a great many lines coincide, we may call the play-period par excellence; but this sort of , play, being due to the difference in development of the

sensory and motor sides of his nature, is a natural and normal trait of the whole period of immaturity. If, as some have said, we can measure an animal's educability by the amount he plays when young, we may with as much accuracy also say that the difference in time between his sensory and motor development measures his rank in the scale of intelligence.

Some of our child-study enthusiasts are going so far in their attempt to fit the material to the child's native interests that they rob him of all the advantage to be had from the stored-up culture of the race and the best products of the highest stage of race development. They propose to feed him on his own product, or on the product of other children of the same degree of culture and development. They take stories as told by children and drawings made by children, and use these as the culture material on which to educate children. Indeed it has been even declared that the teacher should not be more than two years in advance of her pupils in knowledge and culture. Such a view, it seems to me, confounds ability to understand and sympathize with children (which, of course, is a necessary qualification in every teacher), and the identity with them in age and development. A university professor, who is not in touch with childhood, would not make a good teacher; but he should be in touch with childhood, and some of the most eminent pioneers in human learning have been most sympathetic lovers of children. The teacher should have depth as well as height of soul; the former for the sake of being in touch with children, the latter in order to be an inspiration to them.

Our Herbartian friends fall into something of the same sort of fallacy in applying their culture epoch idea. I believe there is a great deal of sound pedagogy to be developed from the study of that most fruitful and suggestive comparison of individual and race development. But, as Prof. Hinsdale often remarks, there is a measure in all things. At present we probably need light on the points of difference more than we do on the correspondences in the two series. We must also say, as does Dr. C. A. McMurry

(Illinois Public-School Journal of February, 1896), that the standard, educationally, is the sequence in the child—not in the race.

For the sake of those who are helped by diagrams, let us give a moment's attention to the following figure:



The two horizontal lines represent the race development and the individual development, respectively. S and M stand for the sensory and motor (or, in a larger sense, the receptive and expressive or productive) sides of a particular activity, e. g., of "read-writing" or drawing. The child grows up in an environment of highly developed culture along these lines, which environment, acting on his receptive impressionability S', hastens its development so much that it is shifted forward and thus separated from the corresponding motor development (M'). The period (II) between S' and M', before the motor development has overtaken the corresponding sensory development is the time of induced play activity. A high order of environment is acting on the individual whose reaction is immature and of a lower order in the evolutionary series.

If I may be allowed to attempt to state the hypothesis in terms somewhat more like the Hegelian terminology, I should accept Dr. Dewey's definition of interest as "impulse functioning with reference to the idea of self-expression." The child, becoming conscious of new ways of self-expression, develops interests along these new lines of activity. That is the first stage. But the soul, as a self-active principle, is impelled from inner necessity to represent its inner self outwardly. During this second period, however, its bodily organs (muscles, bones, nerves, etc.), which it is in the process of making for its own use in self-expression, have not yet been completely developed; hence its self-expression, considered objectively, is inadequate,

but, considered subjectively, it is perfect. "Play is the purest, most spiritual activity in man at this stage, and, at the same time, typical of human life as a whole—of the inner hidden natural life in man and all things" (Froebel). This continued attempt at self-expression by the soul develops the bodily organs which it uses in such activity. The third stage is reached as soon as these instruments of the soul's self-expression are duly developed.

The shifting of the sensory (receptive) development in advance of the motor (creative or productive) development is what makes the Aristotelian catharsis possible. In this way the individual relives the life of the race ideally and not actually. In feeling he touches the experience of the race at all points but does not have to act it out. On the stage, in literature, in conversation, and in social and business intercourse with others we can thus glimpse slightly the larger life of the race in many ways, but only because our appreciation is deeper and broader than our productive activity.

From this standpoint it would seem that we should feel confidence in the desirability of giving the child the highest and best culture material that the race has produced. This must, to be sure, be such as will appeal to the child. The short circuiting that is such a prominent feature of ontogeny in contrast with phylogeny, is most marked in the earlier stages of individual unfoldment; the doctrine of "broadening by retarding" has its most profitable adaptations perhaps in the later stages.

CULTURE EPOCHS.

BY DR. LEVI SEELEY, OF THE STATE NORMAL SCHOOL, TREN-TON, NEW JERSEY.

The article on this subject in the First Year-Book presented at Denver, last year by Dr. Van Liew, did not receive the attention that the subject deserves. This was owing to the precedence of other subjects in the Year-Book which took nearly all of the time allotted to discussion. We owe Dr. Van Liew a great debt of gratitude for the research which he has made, for placing the views of different authors on the subject clearly before us, and for his own views so admirably and conservatively put. He succeeded in throwing a large amount of light upon a subject that is very obscure to the great mass of American teachers. From a critical and historical standpoint this paper will stand for a classic on this subject. It prepares the ground for a wider discussion of this fertile theme, which will result, I believe, in simplifying our courses of study, and in influencing educational thought. While this discussion may not accomplish all that extremists in Germany and this country expect or claim for it, it will doubtless do great good.

The schemes that Dr. Van Liew presents are largely those of Herbart and his disciples. I was very much interested in finding that Rosmini, nearly sixty years ago, in his great work on "Method in Education," apparently quite independently of Herbart, discovered the same truth. Probably no man of that age, and possibly of any age, has ever made so profound and careful an analysis of the mental development of the child as did Rosmini. Certainly the world has furnished very few more profound thinkers than he. He says, "History has the same epochs in the individual as in the whole human race."

The great Italian educator did not believe that arbi trary boundaries in either individual or race development can be established. Nor does Dr. Van Liew. He says (p 112, Year Book), "For this reason we have objected to the establishment of any definite and arbitrary boundaries, at least in application, between the different culture epochs, and for this reason we have ourselves refrained from either setting boundaries or fixing any definite number of epochs in the child's development." This corresponds with the general thought of Rosmini, who says, "It is certain that neither individuals nor races advance with equal steps, and, therefore, that the operations proper to human nature, such as those of which we are speaking, although they take place alike in all human individuals, do not take place in all at the same period; and this holds good in the development of races also. It would be impossible to determine all the circumstances and causes which lead an individual (and the same may be said of a nation) to take such a step exactly in such a year, on such a day, at such a moment, the minute circumstances which influence the human mind being infinite." It seems to me that the limitations hinted at by Dr. Van Liew, and so clearly indicated by Rosmini, mark a very important phase of this discussion, and I shall therefore attempt to indicate a scheme of culture epochs that is at once suitable to the education of every child, applicable to our school conditions, and easily carried in the mind of every teacher. I propose to discuss certain of the correspondences in the development of the race and of the child that are clear and beyond dispute.

I do not see with Ziller and Rein, and their school, that it is wise to indicate so many steps, some of which, at least, seem far-fetched and imaginary in the correspondences noticed. A scheme which divides the life of the child into eight epochs corresponding to the eight school years, marks divisions that the psychologist has failed to find, and which are confusing rather than clarifying to the teacher. It prevents proper elasticity in the course of study, if adhered to with any degree of closeness, and leads to the narrow formalism which already too generally char-

acterizes courses of study and which Herbartians are trying to remove.

Although Rosenkranz does not treat of culture epochs, he does indicate three very clear stages of mental development of the individual, and upon the basis which he has marked out, I shall endeavor to develop a scheme in which the theory of the culture epochs will be found to have practical application. This scheme may be outlined as follows:

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AGE OF THE INDIVIDUAL, RELATIVELY INDICATED.	PSYCHICAL EPOCHS IN THE INDI- VIDUAL.	EPOCHS IN RACE DEVELOP- MENT.
From infancy to about the eighth year.	The intuitive epoch, sense-perception, as the beginning of intellectual culture.	The mythical and herosc epoch.
From the sixth to the tenth year.	The imaginative epoch, development of imagination and memory.	
After the tenth	thinking and reason-	The epoch of freedom, self-government, and recognition of the individual.

I think that in this simple scheme all of the essentials of the theory of the culture epochs are set forth, and that we shall find with Prof. J Mark Baldwin that. "The infant is an embryo person, a social unit in the process of forming, and he is in these early stages plainly recapitulating the items in the soul history of the race." Though there are short cuts for some individuals owing to heritage and environment, so that one cannot mark out six or eight epochs which all must pass through, there are no short cuts in this scheme, all must pass through the stages of sense perception, imagination, and reason. If, then, a parallelism between these three psychical epochs in the child and three great epochs of racial development can be pointed out, we have a principle which will be of great practical value in

forming courses of study. Let us study each of these epochs in detail and see if such parallelism exists.

I. The intuitive epoch.

Of course this epoch begins in the child a long time before he enters school. But no theory of education can ignore the early years of the child before he enters school. This thought has taken deeper hold upon educators of late years than formerly. Hence the remarkable activity in child-study, the more careful study of kindergarten work, the study of the mental growth of little children. Indeed, some of the most remarkable contributions to the educational literature of recent times have been studies of children from earliest infancy.

When the child comes to us at six, he has already acquired many habits, some good, some bad, according to his home environment, and education consists in the formation Therefore, if the theory of education does not of habits. extend to the cradle, and if parents do not learn that the beginning of education is with them, the work of education can never be completely done. And so I take this first epoch to begin at birth and continue until some time after the school life has begun,-just to what age I am loth to mark any definite limit. Indeed, no final limit can be placed to this period, as we obtain knowledge by intuition as long as we live. But that we gain knowledge by the senses at first every one acknowledges, and this means of acquiring knowledge is the chief means for the first seven or eight years of the child's life. Now there are certain characteristics in the childhood of the race that undoubtedly furnish close correspondences with the period of childhood under discussion. Some of these are as follows:

- 1. It seems clear that in the very matter which we have just discussed we have a strong parallelism. The child gains his early knowledge through the senses. The early race had to depend upon this means alone for its knowledge. What could be seen, heard, felt, was the primary source of knowledge.
- 2. Rosmini says: "The infant begins by believing everything." Hence those parents are wise who insist that

promises made their children must be carried out, else childish trust and credulity will be blasted, and deception and falsehood will influence the child before he is sufficiently established in character to be seriously injured by them. But credulity is also a strong characteristic of the early race. Primitive peoples have always shown a disposition to believe until compelled to unbelief through deception. The same is true of the savage and uncivilized tribes that are still found in almost aboriginal state. Hence they are easily imposed upon by traders who misrepresent the value of their wares. There is therefore a clear parallelism between the child and the race in the matter of credulity.

3. The mysteries of nature easily inspire a feeling of awe and reverence in the child-mind, and the same was true of the race in its early stage of development. We find men deriving the, to them, inexplicable works of nature as

witnessed upon land, or sea, or in the sky.

4. The same parallelism of feeling in both furnishes their conception of the personality and existence of God. Rosmini says, "all peoples, in all periods of their history, have recognized the necessary existence of God,—that is, of a necessary unity, first cause of all,—as self-manifest. The most idiotic of men sees this truth as evident, he seeks no reason for it; his persuasion is immediate, and he would wonder at any one who should ask him to account for his belief, and possibly laugh at or ridicule him as a fool or a truter. This is why children so easily understand the word 'God' as signifying a Supreme Being, the cause of all, and give their assent so readily when his existence is aftermed."

The primitive man thinks of God as the Great Spirit, who manifests himself in thunder and lightning, in mighty winds and storms, in the great changes in the elements about him which he is unable to explain, and which are to him supernatural.

Now, as these parallelisms in the first epoch of child development and in that of the race seem so manifestly to exist, is it any wonder that the child loves myths and fairy tales, which are the imperfect expressions of the soul-longings of the race in its first struggles for light? These stories exactly fit the mental development of the child, for the reasons above given, hence they should be used in the family and in the early years of school life. Col. Parker says, "Myth comes from the imperfect answer which nature gives to the childish soul of man. The answers are not false, but they are imperfect and partial, and are to childish souls the solution of great problems. Every answer given to a spontaneous and innocent question contains a golden kernel of intrinsic truth. It is that truth which a child can bear in its early years. It cannot grasp precepts and logic, but it can understand truth, like those who crowded around our Savior, in parables."

But I believe with Felix Adler that great care should be taken in the choice of myths and fairy stories. Of their value his testimony is as follows:

"There is no other literature in the world that offers what is equal to them in value for the particular object we now have in view." (Moral instruction for the primary grade.) Again, "It is the childhood of the race that speaks to the child of today. It is the voice of the ancient, faroff past that echoes from the lips of the story-teller."

Prof. Adler's book on "Moral Education" furnishes an admirable outline of stories drawn from myths, fairy tales, and the Bible, many of which should be given to children long before they enter school, and long before they can read. These stories ought to be told by the mothers and the nurses from the third and fourth year on, and perhaps earlier, and they will be found to contain an abundance of interesting and instructive material suitable to the child's understanding.

It is hardly to be expected that this work will ever be systematically and thoroughly done in our American homes; but even if it were, when the child enters school he has not yet outgrown this kind of work; hence two or three of the first school years must be given to it. The stories must be adapted to the advancement of the children so that they shall neither be too difficult nor too puerile. I am inclined

to think that the period of predominance of the sense-perception in the development of the child will correspond closely with the period in which this kind of material may be used, and therefore this first psychical epoch in the child is shown to correspond to the first psychical epoch in the race.

II The imaginative epoch

I wish to say at the outset of the discussion of these last two epochs, that it is difficult to establish so clear a parallelism between child and racial development for these next two epochs as I think is established in the epoch already discussed. If difficult when the attempt is to show correspondences in but two more epochs, what must it be to outline definite correspondences in four or six epochs additional! And yet, I think we shall find pretty clearly marked parallelisms which will sustain the theory of culture epochs. It must not be thought that the foregoing period has not stimulated and developed a great deal of imagina tion in the child; but this second period gives prominence to the imagination, and it is in this aspect that we are to consider the question Indeed, there can no walls or partitions be erected in our intellectual building, which set off one period to sense-perception alone, another to imagina tion, and a third to reason. The individual imagines and reasons from a very early age, and uses the senses till the end of life. But in the order of mental development imagmation succeeds sense-perception, and reason succeeds imagination, and each of these becomes prominent in the order named.

I have called this epoch in race development the Intermediate. The term mediaval is too limited, and it has a narrow use as covering a period of history of about a thousand years just preceeding the Reformation. Now, none of the authors who use that term limit this period by any such bounds, as the Heroic age and the age of Myths closed many centuries before mediaval times, but this term is misleading. It seems to me that this second period is properly the intermediate; that is, the period between the race in its childhood and its full manhood as indicated

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by the epoch of freedom. It is an advance over the preceeding age when men have lived in families and tribes, to an intermediate stage of growth where they seek to associate themselves with other families for the purpose of government and historical development. This epoch reaches far back in history; the Israelites began it with their judges and kings; the Greeks with the Dorian conquest; the Romans with the fusion of other tribes with the Latins.

This intermediate epoch in racial development corresponds very closely to the view which Rosenkranz takes of the imaginative epoch, which is indicated as follows: "The mental image may (1) be compared with the perception from which it sprang, or (2) it may be arbitrarily altered and combined with other images, or (3) it may be held fast in the form of abstract signs or symbols which intelligence invents for it." If this be so, then the intermediate epoch of racial development is full of suggestions and of material for the imaginative epoch of the child. Abundant and suitable historical material is furnished, which appeals directly to his mind because it corresponds to his own development, for the same reasons that the Heroic age suits his previous development.

But the most important of all lessons which appeal to the child's imagination and properly develop it, must come from literature. Above all things must the teacher introduce good literature, thereby cultivating a proper imagination and forestalling a deprayed imagination, which comes from indulging in pernicious literature. Undoubtedly it is too much to claim this thought entirely for Herbartian pedagogy, but there is no question that this pedagogy does teach that most vital lesson, and that it suggests a practical way of enforcing it.

The imaginative epoch will also use much of the material already indicated for the preceding epoch, which the teacher will begin to use when the child enters school, and will continue to use for several years.

Then, too, during this period, great attention will be given to memory, which is now most retentive. Gems of

interature will be learned, maxims committed to memory, and if a modern language is to be learned it will be commenced at this time, when the child most easily and accurately acquires pronunciation, inflection, and vocabularies.

III. The logical or reasoning epoch.

This third epoch begins when the child is about ten years of age. I repeat that this does not imply that the child has not reasoned before this. Col. Parker is quite right when he places thinking as the center of all work with the child. But now reason is to be prominent just as sense-perception and imagination have had their periods of prominence heretofore.

The last epoch in the history of the race, the present, may be called the epoch of freedom or self government. The tendency of all peoples is clearly towards this end. and this may well be called the epoch of reason, the epoch when men think for themselves and assert them selves. The race is no longer ruled by the senses, nor by desultory uncertain gropings after ideals, but by the power of reason. And we find the closest parallel with this in the development of the individual. The child at this period begins to assert himself, begins to feel his importance in the universe, begins to reason, begins to reach out after personal freedom. As Rosenkranz puts it, "The thinking activity is emancipated from the dependence on the senses to a higher degree than in the processes of conception and perception. The notion, judgment, and syllogism, develop forms, which, as such, have no power of being perceived by the senses. But it does not follow that he who thinks can not return out of the thinking activity and carry it with from into the sphere of image-concepts and perception. The true thinking activity deprives itself of no content."

As to the material which may be used in this period, that suggested by Dr. C. A. McMurry, namely, pioneer his tory, the period of settlements, of colonial history, of the Revolution, and of the constitution, is admirably suited to the children of our country. This whole history culmin ates in the realization of freedom, and therefore, the history and literature of this period is the right material for

the epoch under discussion. Only I would not attempt to separate the work so as to fit the school grades, but would follow the order suggested, the historical order, making the material suit the wants of this third period of psychical development, the period of reason.

Prof. Rein has worked out a similar historical scheme for Germany, and there could easily be worked out a like scheme for each country from its history and racial development, and these various schemes would furnish material from which we could draw, so that all of the great lessons which this present epoch teaches may be given to our pupils.

In conclusion, I believe with Prof. J. Mark Baldwin, that in the development of the individual there are short cut "processes which at first required a longer series of processes," and therefore the attempt to find a culture epoch in the history of the race to correspond with each grade of our school courses, must necessarily end in too fine-spun theories to be of practical value to our schools. But a theory of culture epochs, based on the simple scheme of the three psychical epochs marked out by Rosenkranz, namely, sense-perception, imagination, and reason, furnishes a working hypothesis which can be applied to our school courses. This admits of a wide latitude of application on the part of the teacher, and does not seek to fit all children to one mold. This admits of practical concentration, which is always easily held in the mind, and which does not require of necessity some specified study of the curriculum as a center, yet always and eternally has for its center the child and his psychical development.



Theory of the "Culture Epochs."

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NOTES ON THE THEORY OF THE "CULTURE EPOCHS."

BY DR. ELMER E. BROWN, UNIVERSITY OF CALIFORNIA

- 1. The significance of this theory, in its bearme on the practice of teaching, seems to me to lie in the fact that it gives worth and dignity to the imperfect stages of development. It teaches patience. It makes it appear that the imperfections of childhood are not merely vexations hind rances in the way of culture, but steps towards higher things; or perhaps more justly, it teaches discrimination between those imperfections which are more lundrances, and those which are something nobler in the making. This patience with processes is perhaps the chief philosophical lesson of the nineteenth century, whether inculcated by Hegel or Darwin or by teachers of later date.
- 2. The theory of the realture epochs' seeks to get a clearer understanding of the individual by the wing from in the light of a larger light or apprepare of many oils doubt. This is a method with a fact to one of classical example in Plates Represended to the compact of proceedings to the fact that the work which is more a number of home to be a very more to be a fact to one of the proceedings of the procedure of th

 observation. The method is better suited to the purpose of demonstration than to that of discovery.

3. Does the assumed parallelism between the development of the individual and that of the race actually exist? It is suggested by studies in the beginnings of government, of religion, of literature, of the arts of representation, of music, of natural science, of industry, of morals. Recent investigations in the beginnings of drawing have been especially instructive in this respect. It seems impossible to pursue studies in any of these departments, whether on the psychological or the historical side, without receiving at every stage of progress intimations from the other side. Whether the investigator comes to his task from the one side or the other, he strikes the same trail. Leave out all forced exemplifications of the principle, such as show a disposition to find examples whether they exist or not, and an overwhelming number remain. These facts do not prove the theory true; but they do raise a strong presumption in its favor. It would be unscientific to ignore so many indications, all pointing in the same direction.

But it is not enough to pile up instances and draw from them a general principle. The relation of these facts to other facts must be examined, in order to determine, if possible, whether there is any reason in the constitution of things why the individual must reproduce broad stages in the development of the race.

So far as I have been able to discover, the only serious attempts that have been made to prove that this parallelism is more than a series of chance resemblances, are the brief argument of Herbert Spencer and Baldwin's work on Mental Development; but these are worthy of serious consideration.

The higher developments of human culture may be regarded as so much added to what the individual would have achieved without contact with others of his own kind. Apart from his social environment, he would attain to a certain stage of development, resulting from heredity and reaction upon that environment which we call nature.

In view of current discussions as to the transmission of acquired characteristics, we are modest in our claims for heredity. What lifts the individual in civilized communities above the stage of savagery is not mainly his pre-natal inheritance, but that heritage which he finds awaiting him in his social environment. The savage baby comes into the world with instincts and tendencies very much like those of the baby born in civilization. In a very few years, he has grasped the greater part of the ideas and sentiments common to his tribe. There remain for him only such changes as accompany maturing physical functions and the perfecting of his skill in the performance of acts already familiar to him. When he becomes a grown savage, he is the type of a stage of culture which has added little to the mental equipment which is acquired in early childhood.

This savage state of society makes solid progress to wards higher things by rising to such advanced ideas and sentiments as stand in near relation with those lower ideas and sentiments that have previously prevailed. The higher intermingles with and is assimilated by the lower. A higher that is so high as to stand in no vital relation with the lower, is not really appropriated, and so does not draw to itself the vigor which inhered in the lower. By slow and painful degrees the process continues. It would be interesting to stop and consider what are the forces which thus drive or draw ever upward; but that is not to our present purpose. The process is by some means or other continued, until the stage that we call civilization—until the civilization of our own time—is reached

The savage state and the civilized state are not radically different in their babies. But the civilized human being in growing up, grows much further away from his baryhood than does the savage. His civilized environment stimulates him to more extended and longer development Each stage of his progress if it is to carry with it the bull strength of participation which characterized preceding stages, must a ista in a vital relation to that which went before. It must be in an important sense the cert thing if the whole spirit of the child flows unrestrained into this next stage of important is no dissipation of the particular of spirit as for there is no dissipation of spirital entered to of spirital.

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It is, then, true in a large sense, that the child must, normally, develop by successive stages, much as the race has developed; and that for the very simple reason that the growing child bears a constitutional resemblance and relationship to a race of growing and grown-up children.

4 What are the pedagogical consequences of this principle?

In the first place, let it be observed that the principle is not yet defined with sufficient sharpness and certainty to warrant us in proceeding from it deductively. It may suggest further inquiry in certain directions; it may raise a doubt with reference to otherwise plausible proposals. It may serve us as an important supplemental principle, but not as a guiding principle. Even where it is professedly used as a guiding principle, it seems to me not to be trusted as the sole guide.

- 5. Without being definitely formulated, this principle has received wide application in the education of the past. To take a single illustration. The home education of Protestant countries for three centuries was largely based on the bible, in the vernacular. The book contains not only formal religious doctrine, but also a vast amount of noble "culture material" drawn from different stages of civilization. While the whole was open to all members of the family, and all heard it read, each appropriated to himself that which appealed most strongly to him. There was accordingly provided, from the same Scriptures, the appropriate milk for babes and strong meat for those who were older. It has happened similarly to other peoples that have used the noblest literature of their civilization as the basis of their instruction.
- 6. There is a reason which may not appear on the surface for thus using the literature of imperfect stages of civilization as material for instruction at like imperfect

stages of individual development. Each of these imperfect stages has both its noble and its degenerate aspect. The instinct represented in the love for fairy tales may lead on to the next thing higher; or it may lead down into triviality, unreality, sweet do-nothing, capriciousness, arbitrary willfulness. The instinct represented by the love of adventure may furnish vigor and courage for a higher devotion to the common good; or it may lead to an exaggerated sense of independence, and disregard of authority and right. Now, the great literary examples of these several types throw their weight on the side of the nobler interpretation.

Instead of checking the instinctive movement of the soul, or giving it a downward bent, they carry its full volume with them in a moderate movement toward higher things. For the truly great literature of any of these periods does not belong to the beginning or the middle of that period. It belongs to the end of the period, and points to something higher. As Carlyle has said, "The finished poet * * is a symptom that his epoch itself has reached perfection and is finished; that before long there will be a new epoch, new reformers needed."

So these literatures of imperfect ages have in them something of permanent worth and truth. Note how the Greek tragedians, those mighty teachers of the lesson that "whatsoever a man soweth, that shall he also reap," drew their materials from Homer. Consider, too, how we who have learned to love the higher things of the story of the bible, go back with new love and interest to the simple histories of the patriarchs.

7 I have sought to show that, so far as this doctrine of parallelism contains a valid principle, it teaches us to be patient with the slow, successive stages of childish development, to the end that we may direct the full force of the spiritual life into the nobler channels. It suggests that we learn how to educate children from the way God has educated mankind.

Now, in this there is no hard and fast rule no encouragement to a doctrinaire procedure dominated by a single ergy. But if the new is remote from the old, it is not likely that the full tide will run in the new course. The new ideas may be charged with vitalenergy, but it will not be energy for the soul that has not passed over into the realm where those ideas have sway.

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Theory of the "Culture Process."

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ام این امار امار است. این ما این امار این این است. of the civilization on the one hand and the history of the individual child on the other. Without binding ourselves hand and foot to a pedagogic dogma, we may be heartily thankful when this difficult question of sequence is simplified, as it certainly is in many cases, by marked agreement between these two histories.

INTERPRETATION OF THE CULTURE-EPOCH THEORY.*

DR. JOHN DEWEY, UNIVERSITY OF CHICAGO.

I find considerable difficulty in defining to myself just what part the representatives of this theory expect it to play educationally, and just how they expect it to play that part. The fact or non-fact of the correspondence of development in the race and in the child is one thing; the educational interpretation of that fact is another; and the practical use to be made of it in the school-room is a third thing, though one in the closest dependence upon the second. As definite a statement as any I have come across is that of Prof. Van Liew, on page 116 of the First Herbart Year Book: (1) The need is for a principle that will give correspondence between child and subject-matter: (2) this is supplied in the culture-epoch theory; (3) hence, the cultural products of each epoch will contain that which appeals most sympathetically and closely to the child of that epoch.

Now, there are two questions which I wish to raise here. First, what is the criterion or standard employed? Is it the succession of epochs in the race, or is it the development of instincts, of interest in the child? This may seem, to the wise, an unnecessary or a foolish question, but I have read the recent literature on the subject, and I cannot decide that the writers have fairly asked this question of themselves.

As long as we are dealing with the establishment of the correspondence as a fact, it is quite legitimate to shift from one side to the other, now taking the race, now taking the child. But when we come to the educational interpreta-

[&]quot;A paper first published in the Public-School Journal January 1906.

'This hence is my own interpolation. It is not stated as inference in the text but otherwise I see no relevancy.

tion of this fact, not so! Only if these held an exact parallelism would this be possible. And the exact parallelism is confessedly absent.*

It does not seem to me that the upholders of the theory have clearly recognized that if the correspondence is not exact, the standard, educationally, is the sequence in the child, not in the race. It is a question of psychology, of child study, not of race history. To study first the race side, and finding certain epochs then to conclude to the same in the child is unjustifiable. Pressing the analogy with biological recapitulation as far as it can be pressed, two points stand out: (1) The process of recapitulation takes place biologically during the embryonic period, and many of the phases are exceedingly transitory. They are without any practical import at all, being of value simply to the scientific student-say, the "fish" phase. The analogy then would indicate that it is quite possible that the raceculture gamut is now, say within the first two or three years of child life, and that many or most of its phases are of no educational significance at all, however interesting they may be to the anthropologist. No one proposes that the mother shall modify her diet when the human embryo has reached the "fish" phase, or take any practical note of it. Why should we not follow the same principle in the social recapitulation? Is there not danger of arresting development at that point by making too much of it? Now, I do not go to this extent myself, but there is nothing in the principle, from the side of the race development, why we should not. (2) When the analogy is used, it must be with a profound recognition of the extent to which "short cuts" have developed in the human being. (See Baldwin, Mental Development, pp. 21-28), and the extent to which these have modified the nature of the recapitulation.

The exceptions are, in many cases, more important than the rule. In all cases, it may fairly, even if roughly, be said that whenever an earlier structure is recapitulated in post embryonic human structure, it is simply as a factor,

[&]quot;It will be noted that I do not question the fact of correspondence in a general way

as a contributor, and is modified by the new function to which it contributes.

Now, in the foregoing I am not questioning the correspondence "in general;" I am simply pointing out considerations which absolutely forbid us to begin from the side of race-development and infer to child development. We must, in all cases, discover the epoch of growth independently in the child himself, and by investigation of the child himself. All the racial side can do is to suggest questions. Since this epoch was passed through by the race, it is possible we shall find its correlate in the child. Let us, then, be on the lookout for it. Do we find it? But the criterion comes back in all cases to the child himself, if this is admitted by the upholders of the theory, many who have thought they did not agree will find themselves agreeing. But to admit this, is to come near, dangerously near, to making the child the center.

Moreover, if we keep in mind the modification of the inherited structure to make it subservient to new function, still further changes must be introduced. Just as the visual center of the lower animals is represented in man, but no longer as a complete visual center, so the hunting social epoch is represented in the child, but no longer as the dominant, complete activity, but simply as one impulse among many, having a certain relative urgency.

This fact alone is enough to condemn giving one year out of eight years (one out of five to many) to the hunting epoch of social life—or anything but an incidental reference to it on a higher scale; here is the nomadic epoch and some hypothetical interest now corresponding. Shall we then make this interest supreme and study that epoch? Or, shall we recognize the relative part played by pastoral activities in present society—the grazing in Texas, in Dakota, etc., and then call attention to the fact that whole peoples once lived in that way? The biological analogy—to say nothing of a common sense—would require the latter.

The second question I would ask is this: Admitting the correspondence in general, and as verified and controlled by study of present child-life, how is the inference justified that

it is the cultural products which are to be made the objects of study? This inference is simply taken for granted by the upholders of the theory—it does not seem to have even occurred to them that this point needed discussion; but it is the nerve of the whole matter.

The interpretation of the fact of correspondence, as meaning necessarily or even primarily, study of cultural products, in history and literature, seems to me to rest upon confusion theoretically, and to be practically misleading. Let me state what seems to be the true conception, using first the words of Prof. Felmley (supplement to Herbart Year-Book, p. 195) and then modifying them to bring out my idea more definitely. "The appropriate food for each of our spontaneous interests is the mass of ideas that engaged the ancestors to whom the instinctive interest is due." The modification I suggest is to substitute the term activities for ideas, or, better yet, to conjoin the two terms.

Whatever words be used, the point is that the interest and instinct correspond not primarily to the products of a given age but to the psychical conditions which originated those products; these conditions secured for the child, then he is prepared to deal educatively with the products. When the child is in the "agricultural" stage, it is sheer assumption to suppose that this chief interest is in the literary or institutional products of that epoch; it is also sheer assumption to suppose that this agricultural interest is adequately met on the educational side by allowing it to feed at first on the "cultural products" of this epoch. It is an interest which demands primarily its own expression, and not simply an acquaintance, second-handed, with what that interest effected at some remote period.

The agricultural instinct requires, according to the true analogy, to be fed in just the same way in the child in which it was fed in the race—by contact with earth and seed and air and sun and all the mighty flux and ebb of life in nature. It requires to be fed by knowledge of how agriculture is now carried on, what its products are, how these reach the market, etc. Then the child may be brought into contact with the historical cultural products, and will have

some "apperceptive organs" for them and will be able to utilize them vitally. I do not say that to give him contact with these products before his interests have found some expression of their own is to give him a stone instead of bread, but it is not too much to say that it is giving him relatively, a toy instead of reality.*

The idea that history and literature are the basis of concentration has been assumed to be a necessary consequence of the culture-epoch theory. I hope the foregoing remarks have made it clear that they are not so connected; while, undoubtedly, they do follow at once from that interpretation of the theory which assumes that the parallelism is not between the life and interest of the epoch and the life and interest of the child, but between the life of the child and the products, or results, of the life of the epoch.

It seems strange to me that one can clearly recognize that beginning reading and writing are formal, dependent upon a content requiring expression, and then give to literature any other position. Literature is certainly not an entity by itself; it is expression, as much so, as beginning reading, and educative contact with it means first initiation into the activities and ideas which are expressed. It is as hopeless to get a real vital concentration to center about "Interature" as it would be to get it to gather about drawing. Neither study is central, but each is radial, expressive of some core, some content which is not drawing, nor vet literature.

I may run the risk of shocking my readers still more, perhaps, by saying that a direct interest in history is also five impossible. Children like stories, but stories are histories brought up to date -regarded as part of present life. Children are interested directly in present life, in the social conditions which exist all about them and with which they come in contact; and any genuine, any educative historic interest is simply a reflex of this interest in the existing social structure. If there be such a thing in the child as the nomadic interest, it finds its natural and direct prey not in

[&]quot;It loss not seem to me that Mr. Galbreath's remarks about the intrinsic relation in tween idea and effort to execute it up 163-65, 187, of Supplement to Year Book were adequately met. Their bearing is wide.

the shifting hordes of semi-barbaric tribes as they wandered with the flocks over a half barren territory, but in the railway and steamboat before his eyes, with their cargoes of oxen, and their migratory tribes from Germany and Ireland and the isles of the seas. Let this movement be realized and then there is a basis for considering other modes of movements, and other relationships between ox and man!

One word by way of illustration about the myth. It seems to be assumed in the discussions that the myth is a primitive, simple product which the mind sheds by a sort of direct radiation, or, to mix the metaphor, by spontaneous combustion termed fancy. And that, therefore, there is some special, almost pre-ordained fitness in it for the child. But naivete belongs rather to this view of the myth than to the myth itself. The myth is a complete social product, reflecting in itself the intellectual, the economic, and the political condition of a certain people. Most of the classic myths are still more complicated by containing in themselves records of the conflict of one form of civilization, one type of economic life, one political regime with another. Now these myths, the best of them, told as stories, are a very excellent thing; I have a great respect for the educative value of the right story at the right time, but it is self-deception to suppose that they have a value other than that of a story—that by some inner affinity to the child's nature, he is being morally introduced into the civilization from which the myth sprung, and is receiving a sort of spiritual baptism through "literature" No. the story is an occasional stimulation, an occasional diversion, an occasional awakener; and its permanent value is in the degree in which the child realizes for himself the elements of experience finding expression in the story-a condition more often met by the tales of historic heroes in the struggles of historic progress than in myths.

And the myth itself is of permanent value as a story in just the degree in which the child has been led for himself first to appreciate the natural facts and the social conditions which are reflected in it. If he has been led in his nature study to realize the part played by the sun in the

economy of life, if he has been led to appreciate the historic condition of people with a precarious relationship to fire, myths of the sun and fire may play a serious and a worthy part. Let us treat the intellectual resources, capacities and needs of our children with the full dignity and respect they deserve, and not sentimentalize nor symbolize the realities of life, nor present them in the shape of mental toys.

I have endeavored to point out that accepting the correspondence theory in general, it requires in its educational interpretation and bearings, first, to be investigated, verified, and controlled absolutely from the side of child-life; and secondly, to be utilized primarily from the side of the activities and ideas in society which now correspond to the dawning interest, and only secondarily from that of the historical products of these activities and ideas. Even if the last point is not admitted, I think it must be confessed that there is a gap in the existing argument, from the fact of corresponding epochs, to the study of the products of the race epoch; and that this gap needs to be filled before the theory is relieved of ambiguity and confusion and stands justified.

THE CULTURE EPOCHS.

C. A. M'MURRY, NORMAL, ILL.

Dr. John Dewey has made an important contribution to the discussion of the "Interpretation of the Culture Epoch Theory." He is not inclined to deny a general correspondence in the epochs of development of child and race, but seeks for a more definite and limited application of the theory.

So far as I can see at present, I am willing to accept Dr. Dewey's statement that "the standard, educationally, is the sequence in the child-not in the race," and that "the criterion comes back in all cases to the child himself." In the sense here implied. I regard the child's activities and growth the controlling thought-the center. (This, however, does not, in my judgment, settle the question whether history and literature or some other study or group should form the center of the school course) The value of any enoch, therefore, will depend upon the degree of its correspondence to the child's present needs. Having established this central position and importance of the child, Dr. Dewey seems to desert it in his first argument. He says: "Here is the nomadic epoch and some (hypothetical) interest now corresponding. Shall we then make this interest supreme and study that epoch? Or shall we recognize the relative part played by pastoral activities in present society -the grazing in Texas, in Dakota, etc., and then call attention to the fact that whole peoples once lived in that way?" On what ground here may we substitute "present society" for the child's interest and the child's psychology?

The fundamental assumption is, that the child's need is paramount. Why, then, should the accidents of present society, grazing in Dakota and Texas, determine what a child's education shall receive? Even if the nomadic ten dency were entirely absent in present society, it is supposable that the child's instinct and activities at some epoch may call for it. In any case it is an open question how far present society furnishes the activities and materials best suited to the child's needs. It is the best illustrations of any culture epoch, viewed from the standpoint of the child, which are needed, and not the poor examples which the past or present may furnish. The discussion of this point leads to a definite clearing up of the whole problem of education on its two important sides. First, the critics of the culture epochs' theory insist that we shall not impose that theory and its products upon the child, but examine the child's activities and needs at any age and make this the basis of all experiment with educative materials. I accept this proposition. A second set of critics of the culture epochs' theory come in and demand that present society and the relative part played by certain activities in present society shall determine their value for the child. I reply, "Hands off!" First find out what present society has to offer that the child needs. If the child is the center. the argument against imposing materials on him is just as strong on one side as on the other. Present society, just as past history, has a great many things for which the child has no use at all.

It is not denied in the least that present society must exert an enormous influence upon the child. It is only claimed that the past with its beginnings and simple typical forms of all our elements of culture may, after all, supply many of the best products suited to the child's instincts and needs and adapted to best prepare him for his activities in society. We are the outgrowth of the past and yet destined never to outgrow it. Its influence is immanent in everything we do and think and have. Yet the pedagogical materials suited to mediate the growth of child activities may be in the past as much as in the present.

We may seem to have set into too much prominence a casual (perhaps incidental) statement of Dr. Dewey relative to present society. Be this as it may, the two parties in the coming controversy over this question are likely to

reveal themselves, first, as the advocates of the past with its culture products, and second, the advocates of the present with its immediate direct influences. The child stands in the midst. The dominant influence in his life and growth may be the one or the other, the past or the present, or it may be better still, the combined effect of the two in equal strength. The theory of the culture epochs suggests a sifting-out process by which we may get at those best culture products of the past which have a distinct pedagogical value in the development of child activity.

The second chief point made by Dr. Dewey is in the discussion of culture products versus child activities. His words are: "Admitting the correspondence in general and as verified and controlled by the study of present child-life, how is the inference justified that it is the cultural products which are to be made the objects of study. This inference is simply taken for granted by the upholders of the theory," etc. Again, "Whatever words be used the point is that the interest and instinct correspond, not primarily to the products of a given age, but to the psychical condi-

tions which originated these products; the conditions secured for the child, then he is prepared to deal educatively

with the products."

His treatment of this point raises, in my judgment, the most difficult and important question in the whole discussion. The point lies in the significance imputed to or denied to the cultural products of history and literature. In the first place it will have to be admitted that a child's first perceptions of nature and of society are gained by the activity of his senses and mind as directly affected by his environment. He has six years of this sort of constant and manysided influence from his environment before he enters school. with comparatively little direct influence from history and literature. When he comes to approach literary products in school he already has this active body of apperceiving materials. The practical question for teachers is, How shall the approved culture products (tested with children) be used? And to what extent do they furnish a legitimate and adequate field for child activity? So far as I can judge, Dr. Dewey seems to ignore the distinction between the "literature of power" and the "literature of knowledge."

Dr. Dewey has very aptly expressed the notion that many upholders of the culture epoch theory have held that there is a certain affinity between child life and spirit and the spirit breathed by the culture products of certain important epochs. I shall have to plead guilty to this charge and seek to justify myself till better convinced. The argument, however, goes further back than the culture products. It would seem unquestionably true that the parallelism is between the life and interest of the epoch and the life and interest of the child. All that can be claimed in any case for the culture products as given in literature, is that they may be the best medium through which to cause the child's activities to function. I believe, as is stated, that "the interest and instinct (in a child) correspond not primarily to the products of a given age, but to the psychical conditions which originated those products." How to set the child at work both mentally and physically along the lines of his best instinctive activities, is the problem. Can this be best done by direct contact with the natural and social environment or by the use of culture products as a means, or by a combination of these (environment and culture products)?

Doubtless the sense impressions and reactions of the child upon his environment furnish the "apperceiving organs" for the appreciation of culture products taken from literature. The child is all the time, especially in his earlier years, collecting experiences, engaging in activities which will prove invaluable in the interpretation of culture products (from the past).

Having made all these admissions it behooves us to inquire whether we have admitted everything.

The point of departure from Dr. Dewey's theory seems to me to lie back in one of these original presuppositions. How are the psychical conditions to be secured through which children can deal educatively with culture products? Dr Dewey's fundamental position seems well expressed by

the following: "It is an interest which demands primarily its own expression, and not simply an acquaintance, second-handed, with what the interest affected at some remote period." It is, therefore, an impertinence to force foreign and antique products upon a child when what he needs is opportunity for present activity in his own way upon environing objects. Back among original presuppositions like this is found the parting of the ways that leads to different theories and practices.

A child stands in the presence of influences that move him to thought and action, in surrounding nature and society on the one side, and in the formal culture products of the race on the other. He will not understand or feel the force of culture products, however, till he has first felt and reacted upon his immediate environment. A child of two years, for example, has a very strong impulse to get outdoors, to play in the grass and flowers, to dig and climb, to ride and play, to see and handle everything. At this time, there is almost no capacity for receiving culture products, except what lies implicit in colloquial language, family manners, songs, lullabys, etc. But before the child is six years old, some of the choice literary products adapted to his age, have very remarkable power to awaken thought, and especially to develop physical activity. For example, a boy of my intimate acquaintance, from the age of three to six, was active in climbing, digging, construct ing simple machines, using tools, and in many varieties of child activity, out of doors. He seemed to have quite a strong bent toward mechanical tools, devices, and constructions. He had during nearly all the months of the year, except the coldest, unusual opportunity for variety of out door games, rides and employments, and he used them to the full extent, showing considerable accuracy in observation, and some skill in many varieties of making and construction. Between the age of three and four, his mother began the telling of stories, such as the Three Bears, Perseus, Joseph, The Red Cross Knight, etc. These interested him much, but they were thrown in at odd times of evenings, or in rainy weather. His outdoor exercises



were the prevailing forms of thought and action, and have continued to be so, up to the age of six. He began, also, in his third year, and still more in his fourth year, to express himself voluntarily in drawing, being allowed free use of paper, pencil, or pen. He used very early, also, the scissors in cutting out the forms of things that interested him, from paper. More than a hundred of his voluntary drawings have been preserved, collected out of many more made between the age of three and six.

These drawings seem to me to bear testimony on the main point under discussion. What are the strongest sources and stimuli of this child's activities, at this age? These drawings show that many of them were suggested directly by the more interesting objects of his outdoor experience. For example, a large derrick, with wheel and pulley, which he saw hoisting heavy stones; tools seen or used, as saw, plane, drawing-knife, brace and bit, steam engines, a band wagon with instruments, a bird and nest, a cat, the house at home, boats and ships.

But by far the greater part of the drawings were suggested by the stories read or told to him; for example, the story of Washington suggested the hatchet, trees, etc., Rip Van Winkle and the dwarfs, kegs, gun, etc., were drawn from the story; Robinson Crusoe supplied almost endless efforts at drawing, as the wrecked ship, the stockade, the raft, the fight with savages, feeding the parrot, making a boat from a log, Robinson leading the goat, etc., etc. The story of Bunker Hill and the stories of Washington and the generals and soldiers in uniform also supply suggestions for oft-repeated drawings, all of which have a typical resemblance. Una and the Red Cross Knight bring out in the drawings the knight in armor, sometimes on horseback. Una and the castle, etc. Columbus and his ships, Sir Henry Hudson and the Half Moon are the sources of some of the drawings. The pictures seen in histories and geographies often suggested drawings, but only in a few cases was there an inclination to copy a picture. Most of the pictures are free renderings of scenes suggested by the stories. The drawings show numerous proofs that the

materials, the detailed forms from which the pictures are constructed are taken directly from those objects most familiar to the child's senses. For example, the buildings drawn show a remarkable resemblance to the house at home, no matter what the story may be about. The trees are like those in the yard. Crusoe's hatchet and gun resemble the hatchet and gun the boy has seen at home or at the gun-shop. Of course many of the pictures are suggested by pictures seen in books, as knights, soldiers,

castles, armor, ships, etc.

Again, many of the ideas executed in the yard, garden, and house are suggested by the stories read. Crusoe made pottery and baskets, and the boy does the same. Crusoe and Friday fought with the savages and the boy makes guns and institutes a battle in the yard. Washington had a hatchet an I the boy must have one, and when he gets it, the cherry trees are not safe in his mother's garden. The Red Cross Knight had spear and shield and armor and the boy has use for the same weapons. He has an earnest purpose to construct forts and war ships. He has to make slippers with wings to fly with like Perseus, or a staff to walk with like Quicksilver. Every good story that takes hold of his interest leads to a variety of active constructive efforts in the use of outdoor or indoor materials. An idea seizes the child and must be worked out, and materials must be supplied for the accomplishment. In this case similar efforts were suggested by workmen repairing or building about the house. A furnace was put in with ventilating pipes and water works attached. The boy took bricks and old stove pipes and constructed a rude furnace outdoors. He planned, and to some extent, executed some water-works. He built brick walls like the masons, he dug ditches for drainage and continued to imitate and modify (in his schemes) the plans of the workmen.

The question that arises in the case before us is where did the boy get the impulses and ideas which led to such vigorous, and in some cases, continuous employment with those materials and objects about him? Ideas rule the world, and ideas rule the boy. From what source do the

notions come that act as stimuli to the boy's spontaneous exertions? Do they come from trees and rocks, and animals and other external objects? Do they come from the child's own inner self in the form of instincts that press outward for expression? Do they come from the perception of machines and processes and industrial or other activities surrounding the child? Or do they come from stories which fit his age and understanding?

The testimony of the case cited seems to point back to the stories for those interests and impulses which produce the richest variety of activities in the midst of surrounding objects and in the use of the materials at hand. Of course such a single case can not be used as proof of a general law, and yet it suggests a rule which may apply in other cases.

A case perhaps similar to that of the six-year old boy is that of second grade children in the full treatment of Robinson Crusoe as a study. This story not only interests the children but leads in this grade to a variety of activity in drawing and making. Indeed the success of this story in this grade is measured largely by the extent to which the children obectify the incidents of Robinson Crusoe's story by the use of molding clay, sand, sticks, rocks, pictures, and drawings, and also by visits to those animals and industries which are described in the story and may also be found in the neighborhood of the child. In other words, it seems easier to awaken interest and occupation with many of the familiar environing objects and trades by the use of the story than without it. The story not only interests the child but focuses his instinctive activities along definite lines of enterprise. It clears up the child's thought and converts vague instincts into definite aims and he then gladly sets to work and makes use of his surroundings. In other words, the direct contact with nature and environment is not so stimulating as the indirect (through stories).

A child needs then to approach nature and environment not bluntly with his senses, but with ideas, keenly penetrating the things around him with the sharp point of an interesting problem which the story has revealed to him. Or, putting it in another form, the story is a revelation to the child of his problems. He becomes conscious through it of what he wants. This is a great saving of time, and appears to be one of the suggestive means for helping the child to abbreviate the important epochs of his development. If he has to go blundering along through a multitude of experiences toward the goals which his instincts point out all too blindly, he will fall far behind in his development.

Dr. Dewey says: "The agricultural instinct requires, according to the true analogy, to be fed in just the same way in the child in which it is fed in the race-by contact with earth and seed and air and sun and all the mighty flux and ebb of life in nature. It requires to be fed by knowledge of how agriculture is now carried on, what its products are, how they reach the market, etc. In our nature study and geography work of second and third grade we are trying, in some of the schools, to realize almost the exact goal here set up. We visit the gardens and study the products and methods of the garden. We plant a school garden. We observe plants and domestic animals, etc. We study commercial products with their growth, uses in manufacture and shipment, trade lines, local exchanges, etc. But we have found no better means of approach to agriculture, the trades and natural objects than the story of Robinson Crusoe. It seems to awaken a keener relish and appreciation for these very things than they themselves, unmediated, can stimulate. Just as the geography of Greece becomes a matter of curious interest to us because of the remarkable people whose exploits and achievements we have already become acquainted with, so the story of Robinson Crusoe uncovers to the child a series of interesting experiments and elementary problems in life and accentuates them with such a tact that the child is in the very attitude most favorable to the study of nature or agriculture or housebuilding. The story, therefore, in not so much a culture product of the past to be imposed upon the child as a pedagogical device for stimulating a child in the quickest and most efficient way to that very self activity and immediate converse with nature and the whole environment which we all desire.

The educative effect of literary classics (culture products) has been matter of much experimental testing during the last few years in the schools both of this country and of Europe. We are not dependent in this case entirely upon theory, but upon tests. The amount of stimulus that has been brought into the common school grades, from the first and second grade up, through the use of these rich and appropriate culture materials is very encouraging. I am inclined to think that the effort to introduce nature study and the self-activity that springs from direct contact with the environment, although it may be equally important, has not been equally successful. I think it is a more difficult problem, and one that requires more time and skill to work out. We may find yet that it can be worked out better in conjunction with the use of literary products than in disregard of them.

Before closing this paper I wish to call attention again to two phases of the value of these culture products in literature, which will need fuller treatment at some future time.

1. Present society in some cases does not furnish good illustrations, for educative purposes, of important culture epochs. The cowboy is not a good specimen of the nomad. Sullivan and Kilrain are not as good examples of personal prowess as Achilles and Ulysses. The migratory hordes from Italy and Germany and Ireland that flock to our shores have little that is attractive and instructive to our children. Besides, these things are not directly accessible to the great majority of the children. If they are brought home to the perception of children at all, it must be by means of verbal descriptions and pictures, and I think the choicest descriptions from Homer and the Bible have much greater power in every way than anything our newspapers and information books can furnish.

Many things in present society have no educative value for children. Instruction should let them alone till the children are older. The criterion for testing the educative value of a thing is not simply its existence in present society. Many things are bad, others are inaccessible, be-

cause of distance or complexity, and still others are not good enough to compare with choice culture products. And yet we all agree upon bringing in from present society everthing that can properly stimulate a child's self-activity and help to cultivate him.

2. Literature is not simply expression; it is art. There is an infinite space between literature and beginning reading, if by beginning reading is meant the forms of expression used in our primers. One is the highest phase of concentrated educative power, the other is the nearest approach to meaningless form. Literature may not be an entity in itself, but in the hands of a good teacher, it is the greatest educative power known to man. Witness the educative influence of the Scriptures upon the most progressive nations. Think of the revival of learning in Europe. What made the Puritan under Cromwell and in New England?

A CRITICAL VIEW OF THE CULTURE EPOCH THEORY.

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In all educational effort we assume the possibility of directing mental development. This assumption derives its justification from the universally admitted proposition that consciousness is influenced by external agencies. No one in actual practice hesitates to make this admission though in theory he may conceive reasons to doubt it. This is an educational postulate. In a very true sense the world is for any person what he makes it, whether through force or choice; but in either case, some combinations of instinct, impulse, or need, some body of stimuli from externality occasions if it does not cause, the creation. Self-education can mean nothing less than development through the interaction of moulding and building both in thought and deed, physical forms and forces, ideas, and interests, uninstructed by another. When in teaching, one intellect or will attempts to influence another intellect or will, the work must be done through the medium of matter. The great fact of the world as well as the chief interest of education is this productive interrelation of the physical and spiritual. Either, isolated, is comparatively of little concern. The human race came upon the earth destined to meet this stern fact, faced it, took up the struggle and culture began. Man steps to higher comforts and capabilities "by the sweat of his brow." What is true of man in this respect is also true of the individual. The child is born into the world a feeble thing, to recreate and to master it through sense and thought. His will reacts also to shape and subdue it to his own idea, need, and purpose. The culture of the child and the race comes from interaction with environment. By living in the actual world they

become efficient actors. Does this view throw any light on the problem of how "the redevelopment in the individual of power already developed in the race" can be best secured?

It was an important era in the development of man as it is in the individual when he became conscious of his power to use nature to his self chosen ends. It was a triumphal stage when he became aware that he could determine to some extent his own direction and progress in education and civilization. Another such period was reached when he found that he was not entirely bound to his own experience, but that he could in a very important sense use experiences of others, and that in true self-realization through experience, he must to some extent take up into himself, add to and transmit the acquisitions, attainments, and accomplishments of others of his kind. In a sense all cultural products that survive become records for posterity. But language, art, literature, and the like are records of peculiar power. It was another era of signal advancement in the race as in the child, when man became conscious that his own limited advantages to cope directly with the world-influences could be extended through reading and instruction. Development can be affected by a teacher. The ideas of self-direction and social influence marked significant eras of evolution. The concept, teacher, is one of the most important of cultural products. With this new concept the problem arises, how far can an individual be led in education with economy of time and energy, to attend to powers and achievements of the past as they can be found embodied in art, literature, and history? How far will a comprehension of the social, civic, and commercial struggles of the past, as he can get them through instruction, affect his ability to cope with the forces that surround him with the problems of his future? We have in this analysis an important distinction What are the relative values for development of mediated and immediated interaction of the individual with the world's forces?

However nourishing for development the cultural material of the past may be, and however effectual, therefore, instruction through language, the importance and necessity of direct personal experience and a mastery of the situations that surround one cannot be ignored. Environment dictates a number of inviolable commands. It shapes largely the physiological and apperceptional conditions of work. The child's liveliest and most numerous ideas, his ruling and abiding interests, his capabilities in action, are determined largely from without. Again, what one is able to understand, sympathize with, and represent as matter of any consequence to himself and to the world depends upon its possible connection with his past. The subject matter of instruction must fit into those apperceptional links. Furthermore, the physical, intellectual, social, and institutional life that surrounds one impresses upon him certain aims for education. The teacher cannot wisely run counter to these. He must find them and give to them an ideal tendency. The general objects of the educator, therefore, in part, arise out of the physical and sociological relations of the educated; hence, to some extent, courses of study will be objectively determined. For another reason, the teacher must draw his aims from the life that surrounds the child. The individual is to live in the world. and should be able to study and learn of it constantly. Through instruction he should be given the wisest insight into the world about him, and in training the most efficient control of it. His ideas, interests, and powers must be adapted and adjusted to the civilization of his age. How best to secure this is the great problem. These demands from environment it is not the business of the educator to question, he simply must recognize them and proceed upon a basis that corresponds.

The world and human spirits once for all are continuing in a ceaseless interaction and the teacher becomes a coworker with this divine appointment for education. He can co-operate with helpful agents, counteract evil and objectionable influences, and give an ideal tendency to those that are serviceable. To this end the teacher must select and choose that material for instruction through the use of which he can best participate with the "power that makes

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for righteousness" and best living How can culture material be selected which when used properly will produce the highest form of development? To perform properly this responsible piece of work, it is obvious that the educator needs a principle, psychologically sound, to guide him Is there any one that meets the requirements? Does the Culture Epoch Theory? It is claimed for this theory that it does. It is pointed out to us as "the guiding principle in the selection and arrangement of materials of instruction." Its advocates assume (1) "the parallelism, or better, analogy, between the development of the individual and that of the race;" (2) the possibility of describing this development as a progression through certain epochs of culture; (3) a correspondence of some nature between given epochs in the individual and the race; (4) a particular educative value of the cultural products of any epoch in the race for an in dividual in the corresponding epoch, and (5) a point which is not always borne sufficiently in mind, the possibility of meeting the demands of development through language instruction in what has been thought, felt, attempted, and achieved in times past.

It would seem that a mere statement of these assumptions might raise in question the validity of this theory. Certainly a brief analysis of the ends which it should serve will bring into clear light a number of apparently weak points. The total development of an individual has many demands upon educative agents or materials of instruction The increase of power in any direction makes necessary a corresponding variation in the culture material; it should grow more and more complex; and involve from step to step new complicating elements, or unexpected applications. The commonly accepted definition of education as an 'unfolding process, a development into fuller, more perfect living" renders necessary a variety of subject matter. The world is to be seen and consciousness revealed in a manifold of relations and interests. Instruction and training must avoid one-sidedness of development; hence, courses of study should posses a variety of stimuli to activity. Many-sided growth demands a broad survey and selection

of subjects of instruction. The character forming purpose of education asks that a certain natural and rational relationship be discoverable in the educative factors. Their use in instruction must produce strength through unified relations in thought. And since the individual is to do, not think merely, he must be led to find himself in the world and civilization in which he is to live; he must have not ideas merely, but capabilities of execution. To this end the culture materials must lead to an appreciation of what now ought to be done and also to what now can be done by the individual himself, and to a development of ends and means, of motive and confidence, for real action. He must become more and more able to represent himself and the products of his thought as in actual service to men, among men. It should be remembered that the factors which are to affect this total development are not to be thought of as working singly and alone through successive epochs but contemporaneously. The course of study is to affect the whole child. Would the best educational interpretation of the correspondence principle meet these demands? It must be examined in some such light as this, and however true and valuable it may be we need to know more precisely its real limitations. Some are already claiming, it would seem, too much for it.

Epoch Theory will stand the test when examined under the demands of the foregoing requirements. (a) The genetic principle when applied in its broadest way will, in some instances, do violence to the demand for advance in instruction from the simple to the complex. We cannot fairly assume that, within all circles of thought and branches of learning, succeeding stages of development are more removed from the child's earlier powers of apprehension and sympathy. Do not principles as comprehended by people of different epochs often grow simpler? Applications of principles may grow more numerous and complex, but the thought itself is clarified through time. Again, apperaintly masses greatly affect simplicity. A child may grasp much more easily the thought of an object of com-

mon experience than of one in itself much simpler which is some distance removed from his daily round of thought and action. Furthermore, the genetic principle does not adequately meet the necessities for apperceptive relationships. As a matter of history it is interesting to appreciate the relative position of the reaping hook and the self-binder, the tallow candle and the electric light, but an idea of the first contributes little to the understanding of the second in either case. (b) The theory will be found helpful in the selection of some topics and in determining their sequence, but (as it is now interpreted) it certainly cannot guide in giving objective and observational training. It might have something to contribute to the form of mental activity, but not directly in choice of materials for study. Yet this choice might be indirectly influenced, though not as it now is through the mediation and suggestion of literature and history. (c) The relation of ideas and cultural masses as we find them in these products of the past, are not necessarily the best relations for apperception nor for character-forming instruction. Instincts, ideas, and interests are found contemporaneous which are not to be commended as wise aims for guiding in the development of the individual.

Some sifting and sorting must be done and materials from different epochs must be used at the same time for purpose of correlated instruction. Another guiding princi ple is therefore needed. (d) The individual is to be prepared to live in and to imitate the best of his own age and environment, not that of past conditions and culture. Suppose it be granted that he can get completely into the present only by being led to "imitate the culture of mankind in general, as developed in its various generations," under our present conditions of culture and knowledge of the past, is that possible? But the proposition itself is to be questioned. The child is to learn to live in his world by living in it, the teacher assisting. And the child's world is mainly the little place and circle of experience called home and school, in which he lives and moves and has his being This region is full of curious things that direct attention, stimulate inquiry, and awaken the imagination,

In selecting materials for culture two aspects of development must be kept in view, the ends to be arrived at in the use of materials and the means of realizing these ends in the consciousness of the pupils.. The teacher in directing the growth of a child needs a norm of results for different stages and a knowledge of the best exercise and nourishment that will regularly produce this norm. These necessities must be met through the study of children directly, in an analysis of the culture materials and by an experimental use of them. If individual and social development are to be compared, a more careful mapping out of their growth with these two aspects in mind must be done. In neither case has satisfactory determination been reached In fact the concept of what is involved in development has not been clearly and completely analyzed in any of the discussions upon the Culture Epochs. Consequently misinterpretation is not infrequent, to say nothing of indeterminate language in use. Certainly no exhaustive study has been made either of the race or the individual as a basis for determining in a concrete way what the problem of parallehsm really means. Until this is done comparative study is a thing of fancy; the correspondence principle is a conception of poets.

When a relative study of two processes is made, the student necessarily has in mind two or more characteristics for comparison. In what respects are we to suppose the development of the individual and the race to be alike? What are the attributes to be compared? It must be confessed that one can easily become baffled in any attempt to secure clear and definite conclusions on this point. It is possible to compare results of development as ideas, interests, capabilities, and the like; or factors of development as physical, social, commercial, and others similar that give rise to these results; or perhaps, better the instincts, impulses, and needs that lead to activity upon environment which affects development. But rarely has it been explicitly stated in what feature the resemblance consists. Generally there reassumed a relationship of peculiar educational importance between experiences of early peoples as recorded in their

history and literature and the individual's educational needs. How this can follow from the supposed similarity of development, is not usually made plain. The fact might be experimentally demonstrated, but certainly cannot be a priori deduced. If this be true the theory would simply point out the way of experimentation, not of unquestioned selection. It is a matter of serious doubt whether the static product of adult minds possesses the educative value attributed to it for effecting the kinetic product of the evolving individual living and growing under a different, varied, and changing environment.

When development is properly conceived, it will be seen that the problem of real selection is not so much as we have supposed, the choice of cultural products to be used in instruction, as it is the determination of ends of development for children of different ages and experiences, and the adaptation of exercises and mental food to their requirements. In assuming to control development the teacher takes to himself the responsibility of making this analysis, determination, and adjustment of influences to the self-activity of the child.

Thus education is a causal concept. In it we see a process possessing ends as effects and agents as causes. The teacher, therefore, in stimulating and directing development must comprehend in his idea the end and the means of development. These are to be determined for all stages of growth. Does the Culture Epoch Theory aid in this? If it assists at all it must either aid in selecting appropriate ends for development of children of a given age from which we might infer the kind of activity and nourishment or rec versa. Obviously in the present stage of imperfection it can do this in neither case. The epochs in the race and in the child with their corresponding cultural products of knowledge, interests, and capabilities together with the activities and agencies that produce them must be more or less independently determined. We cannot infer what these two elements of development should be in one case from what they are in the other. Yet something of the kind is done in application of this theory. When the material of instruction is selected, the end of development and mental activity is thereby to a great extent determined upon. It is presumed that this product has wrapped up within it just that which is necessary under wise treatment by the teacher, to determine the development in both mat ter and form Is it fair to suppose that the products of any remote civilization have in them the wealth of material necessary to shape the ends of instruction and training for the present age and advancement of educational need, method, and philosophy? It must not be overlooked that materials can shape ends as well as ends can influence in the selection of materials. Again, if the notion of development were properly analyzed it would seem that the use of cultural products of early and remote peoples as embodied in form ignores one of its most important aspects, viz., how the ideas and products are developed. Would the principle of correspondence or psychological demands of instruction justify an attempt to develop in the child through language what was developed in the race through direct contact with nature and the world?

To sum up what this paper has aimed to suggest rather than to argue, the correspondence principle when educationally applied comes amiss upon the following points: (1) It magnifies beyond practical or theoretical acceptation an assumption of an inner regulative principle or law of development that tends to shape the individual regardless of environment. (2) It fails to give due importance to the psychological fact that the child's liveliest ideas, interests, and activities are primarily awakened and inspired by his surroundings and only secondarily by his representations of symbolized realities of some remote time, place, and people. (3) As interpreted, the culture epoch theory points primarily to one source of culture -to expression in one or another form, and mainly to that of history and lit crature of earlier peoples. The basis of the child's interest and ability to read history and literature is overlooked; the child is led away from the real concrete world; and instruction tends more and more toward the formal. 4 Consequently, if its application be not limited, observational and manual training are not likely to receive proper recognition. (5) There can be little doubt that under this theory the educative value of past culture is overestimated. It is given the honored place of determining to too great an extent the ends and means of instruction and of settling upon the successive and simultaneous relations of topics and studies. (6) It seems, therefore, to minimize the function of philosophy of instruction. The motive as well as the materials for instruction seem to be found in the history of racial epochs, not in psychology, ethics, nor sociology of the present age. What has been, not what ought to be, directs.

THE COLOSSAL-MAN THEORY OF EDUCATION.

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Professor Rein observes that the idea of the analogy between the individual and the general development of humanity is a common possession of the best and most noted intellects. "It appears, for example," he says, "in the works of the literary heroes Lessing, Herder, Goethe, and Schiller; with the philosophers Kant, Fichte, Schelling, Hegel, Comte; with the theologians Clement of Alexandria, Augustine, Schleiermacher: with the Darwinists Huxley and Spencer; with the classical philologists F. A. Wolfe, Niethammer, Dessen, Luebke: with the pedagogues Rousseau, Pestalozzi, Froebel, Diesterweg, Herbart, Ziller, and others.* This, however, is by no means a complete list many other writers could be named who have found use for the same analogy. Some competent scholar could render a valuable service to thought at our present stage of philosophical and pedagogical discussion, by bringing together into one place the principal passages of literature in which the analogy is expressed, and subjecting them to a thorough criticism. Were this done, we could then determine how far the writers have used the analogy for a rhetorical purpose, and how far for a logical or scientific purpose. To illustrate these passages, it will not be amiss to quote two examples. The first is the well-known passage from Pascal, "that miracle of universal genius," as Sir William Hamilton calls him.

"The whole succession of human beings throughout the whole course of ages must be regarded as a single individual man continually living and continually learning; and this shows how unwarranted is the deference we yield to the philosophers of antiquity; for, as old age is most dis

[·] Inclines of Pedagogies (translated by C. C and Ida J Van Liew) pp 97 98.

tant from infancy, it must be manifest to all that old age in the universal man should not be sought in the times near his birth, but in the times most distant from it. Those whom we call the ancients are really those who lived in the youth of the world, and the true infancy of man; and as we have added the experience of the ages between us and them to what we know, it is only in ourselves that is to be found that antiquity which we venerate in others "

The second example is from the first of a series of discussions that created a great furor in the world, thirty or

forty years ago. *

"This power, whereby the present ever gathers into itself the results of the past, transforms the human race into a Colossal Man, whose life reaches from the creation to the day of judgment. The successive generations of men are days in this man's life. The discoveries and inventions which characterize the different epochs of the world's history are his work. The creeds and doctrines, the opinions and principles, of the successive ages, are his thoughts. The states of society at different times, are his manners. He grows in knowledge, in self-control, in visible size, just as we do; and his education is, in the same way, and for the same reason, precisely similar to ours."

Now, it will be admitted that, in a rhetorical point of view, these passages are bold, striking, and well adapted to arrest the imagination. Like the other similar ones, they suggest to the analytic mind some important questions, viz: How far does the parallel between the race and the individual hold? Is the Colossal Man anything more than an effective figure of speech? Does the analogy furnish a basis for any body of belief or doctrine? Can we found upon it any organized system of practice or conduct? These questions lead to still others. What do the writers who use the Colossal Man so effectively really mean by him? Do they imagine that he holds aloft a torch that illuminates theory, and so guides rational practice? In respect to these last questions, some writers probably mean more, and some less, but there can be little doubt that, if

^{*} Easilys and Reviews 'The Education of the World," by Bishop Temple.

the office described in the first paragraph above were performed, it would clearly appear that a great majority of these writers mean little or nothing more than an effective metaphor, and thus the argument from authority, in favor of the culture epochs, would be greatly weakened. It is certain that Pascal sought only an effective refutation of the current notion that ancient opinion was of peculiar value. He held with Lord Bacon, antiquitus saeculi juventus mundi. Still, the conception is a favorite one with writers on sociology, some of whom go so far as to make it generate a veritable sociological mythology.

It is not proposed in this paper to subject the Colossal-Man theory in general to a rigorous examination. It will suffice to offer two or three remarks about it. One is that analogy, while very important, has been the source of more idle fancies than all other forms of argument; another is that this particular analogy is a pecularly enticing one, offering no end of "points" to the ingenious mind; and still another that in one important point this particular analogy breaks down altogether. An able writer, who says that he has never thought the illustration a very happy one, asks: "What is the exact feature of resemblance?" "If it is merely meant," he says, "that various races have borne their share in the product which we call civilization, the proposition is one which is not very likely to be disputed. If, on the other hand, it is meant that all races, strong and weak, civilized and barbarous, must have the same interest—that, whenever one member suffers, all the members suffer with it—the proposition (not literally true even of the natural body) is one that might very well be disputed. But it is not chiefly on the score of ambiguity that we find fault with the comparison. The conservative and eminently disbeartening prejudice that all civilization tends to decay, is fostered by an attempt to force an analogy between the individual that withers and the world which is more and more."0

It will be readily admitted that there are points of resemblance between the race and the individual. For ex-

^{*}L A Tollemache Safe Studies

ample, in his first years the Colossal Man, far from being a metaphysician, or even a natural philosopher, lived in his senses. His first course of study, so to speak, was furnished by his external surroundings. It was nature-stuff. Physics was before metaphysics. The same is true of every individual who joins the great procession that we call the race. Again, the Colossal Man gradually grew out of his senses; he took up abstract thought, and in time developed science and philosophy. Here again the individual repeats the experience of the race. Once more, the Colossal Man soon began to accumulate humanistic stuff, which has played so great a part in his culture. And this again is seen in the individual. So far certainly there is a parallelism between the two. We may agree with Goethe, "Although the world in general advances, the youth must always start again from the begining, and, as an individual, traverse the epochs of the world's culture." With a limitation, we may not only agree with Kant, that the education of the individual should imitate the culture of mankind in general as developed in its various generations, but we may go farther and assert that it will do so.

But all this was seen with perfect clearness long before the culture epochs were heard of among men. What is more, these facts have always had some bearing upon pedagogical theory and practice. There was long a great failure to assign to them due importance; it may well be that, down to the present, courses of study for elementary schools are too scholastic; but these errors were in course of correction before the day of Herbartian pedagogy, and it may be questioned whether, on the whole, that pedagogy has done much to promote progress in that direction. For example, notwithstanding all that the Herbartians have said about development and epochs of development, Ziller, who was the first to work out the scheme, made his early school course wholly humanistic, thus entirely ignoring naturestuff. It may be replied that the six years of life before the child comes to school correspond to the epoch in which the Colossal Man lived in his senses But to this argument the fatal objection is, that neither the race nor the individual passes by a leap from one kind of education-stuff to another. The historical priciple, then, did not prevent Ziller from falling into a dangerous error.

The practical pedagogical question is, What things shall the child be taught-and in what order? A rational answer to this question must assume that a previous one has been answered, viz.: What is the standard or criterion to be employed in choosing and arranging education-stuff? Here the Colossal Man steps forward and blandly assures us, "If you will carefully study my life you will have the criterion that you need." This is no new answer. It is associated with the names of Condillac, Comte, and Spencer. Still, I am not aware that any theorist, not to say any practical educator, ever undertook to work out a course of study for schools on this line until the Herbartian pedagogists took that task in hand. Furthermore, Herbart himself does not appear to have done much more in this direction than to throw out some general suggestions, which others have improved upon. These improvements the Herbartian pedagogists denominate the theory of culture epochs.

More definitely stated, this theory assumes that the life of the individual and the history of the Colossal Man are parallel throughout; in a word, that the periods, epochs, or stages of development are the same in both cases, only of very different lengths. Accordingly, if you wish to know what the individual child ought to be doing at a given time in his life, search history to discover what the Colossal Man was doing at the corresponding time, and you will have an answer. Such is the historical principle. Or, to be still more definite, in a certain epoch the Colossal Man was evolving myths, legends, and the like; therefore, in the corresponding epoch the child should be well furnished with story-material, which is, of course, sound advice, no matter what we may think of the reason.

Before offering some remarks on this theory, I shall describe what I conceive to be the manner in which the accepted course of study, so far as it is rational, must be defended. To do this is also to answer how it must be rendered still more rational.

- 1. Study carefully the nature and the order of mental development, not merely in one person but in many persons.
- Study with equal care the various studies considered as education-stuff.
- 3. Discover by careful comparison and verification the adaptation of these studies to mind at its successive stages of development.

This is a perfectly natural and comprehensible method. We must not, indeed, be satisfied with our own verification of adaptation, but resort to the wider tests of experience. This experience, however, must not be something too remote; it must be near at hand—something more tangible than the great generalizations in which the Colossal Man delights. This is the only workable criterion. To the application of this criterion child-study makes an important contribution,—a contribution, be it observed, for which we can have no real use if we are simply to follow in the footsteps of the Colossal Man. And once more, the practical demands of life, the pressure of environment,—constantly exercises a great influence on education and must be always heeded.

Much is indeed said by the advocates of the enochs theory of the conflict existing between the order in which the mind acquires knowledge and the order in which men of science arrange knowledge. Psychology and logic, they tell us, clash. This is perfectly true if we take logic in the Scholastic sense. No naturalist wishing to give a child a knowledge of nature or a love of nature would begin with a microscopic examination of undifferentiated protoplasm. He would begin rather with the familiar animals of the field and forest. This would be to conform to the order of the education of the Colossal Man; still, we have not learned it from him, but in a much easier and simpler manner. The question may be asked, Is not logic psychological? Logic recognizes the accumulation and generalization of facts as well as the application of generalizations to special cases. There is such a thing as induction as well as deduction. According to the logic of the Schoolmen, the proper way to teach geography would be to begin with the conception of the earth, and that may be the most finished scientific conception of geography today; but the method which begins at the pupil's own home is not, properly speaking, illogical.

When reading expositions of the culture epochs by their advocates, I am always struck by an unconscious lack of confidence in what they are advocating. What I mean is this: After laying down the historical principle, and prescribing their course of study, they immediately fall to defending this course with psychological arguments. Repeated examples could be given. Thus, we are told that the principle of historical culture harmonizes with the psychological argument that subject-matter corresponds to the child's stages of apperception; and again, that the material and formal points of view coincide. Now this is perfectly proper if our guide is to be the child-mind in connection with studies; but if we are to do things because the Colossal Man has done them, then it is wholly illogical. It may even be asked, Unless the historical principle, when once admitted, can be applied deductively, what do the Herbartians more than others? In other words, if our last resort is to psychology, why not our first resort? What is the use of abandoning a direct road for one that is both circuitous and difficult? I confess that when I see a Herbartian carrying his culture epochs, and at the same time defending his course of study with psychological arguments, I cannot help thinking of the good sense shown by David when he rejected Saul's armor and went forth to meet Goliath armed only with a sling.

I am no enemy of the Colossal Man; I would not even make fun of him, for in his own place I respect him thoroughly. He is a dignified and imposing figure. He has some very important lessons to teach us. The lessons of universal experience are among the most valuable of all lessons, and it gives a certain vividness and majesty to them to conceive of them under the image of a single man. The trouble with these lessons is their vagueness, growing out of their universality. For this reason it is often better

to deal with concrete individual experience; as, for example, to study Alexander or Napoleon or General Jackson rather than the Colossal Man who absorbs these men and all others into himself. In respect to education, we have seen that the monitions of the Colossal Man, while wise, are of the most general character. They deal only with the largest, subjects. What has he to say that can aid us in correlat. ing nature-studies and the humanities in elementary schools? What has be to answer to the question, In what should a child's studies from eight to nine years of age differ from his studies from seven to eight years of age? Nothing, nothing, absolutely nothing. It is perfectly true that in no two years of the normal child's life are his knowledge, apprehending power, ruling interests, and educational needs the same; that he goes somewhat rapidly through a succession of epochs in his mental development, and that we must have some idea of the nature of this development, if we are to make the best adjustment of subject-matter to these stages. But if the world had waited for the historical principle before attempting this work, education would have been far behind where it is today, if indeed it would ever have made any real beginning. Still more, even the large pedagogical lessons that the Colossal Man teaches are found out more early and directly in another way. The historical principle is therefore left merely as a subject of curious speculation, or as a general confirmation of what we have long been doing. It is in no respect a practical organon.

The theory of parallelism involves, however, something more than has been stated. Peoples, nations, states, are like the individual and the race, coming in between them. In fact the analogy is much closer between the individual and the nation than between the individual and the race, for it is true, as we are often assured by the commencement platform, that nations do not merely rise and flourish, but also decay and die, while the race lives on. At this point still another question confronts us: Have all nations, in their development, passed through the same stages or epochs, or passed through them in the same order; and, if

there are differences, how are we to identify our particular guide? It may well be that the Colossal Man is somewhat inconsistent with himself, just like the individual.

To sum up the leading ideas that have been advanced, I do not deny a certain value to the conception of the Collossal Man, or question any one's right to investigate his history thoroughly, and to make all be can out of him. No doubt some find the conception very suggestive and stimulating. My purpose has been merely to question the value of the conception for the ends of practical pedagogy. We bave seen that the lessons which it suggests are of the most general description, and that we already knew them before the Colossal Man appeared on the scene. We have seen also that this conception wholly fails to answer the really difficult questions which arise in the fabrication of the course of study. The method is a reed that breaks in our hands. Its so-called applications, its devotees do not themselves accept, until they have tested them by other criteria than the historical principle. In a word, I do not recall a better example of the not uncommon habit of calling in a great hypothesis to explain what is comparatively simple. Pedagogists and educators, in the enjoyment of their emancipation from tradition, sometimes commit the great mistake of weighing themselves down with too much science and philosophy.

THE CULTURE EPOCHS.

BY DAVID FELMLEY, A. B., NORMAL, ILL.

No intellectual movement in recent times is more significant than the change that biological research has wrought in our interpretation of psychical phenomena. We no longer speak of the body as a "house of clay" with an "indwelling spirit." Body and mind are one. Both are the creatures of development, and their evolution has been along parallel lines in which each has reacted upon the other. The brain is no longer the sole organ of the mind. The whole body, especially the muscular system, with its motor activities of expression, is quite as important in intellectual development as the mechanism of sensation by which our ideas are gained.

Among the great generalizations of biology stands Von Baer's Law. "Every individual organism in its development recapitulates the stages in the evolution of the species to which it belongs." It is not necessary to review the mass of evidence upon which this law rests, nor the facts adduced by Von Baer and other embryologists to show that man is no exception. That the heart in the human embryo is at first a simple pulsating vessel as in mollusks, that not long afterward gill-slits are developed in the neck agreeing in form, position, and number with the gill openings of early fishes, that the lungs are plain modifications of an air chamber originally serving as a float, that still later the presence of a distinct tail comprising one sixth of the entire spinal column, the growth of a dense coat of hair coverthe entire body excepting the palms and soles, and the greater proportionate length of the coecum and vermiform appendix are indubitable evidences of affinities with lower mammals; that the shortened great toe at right angles to the foot in the last stages of embryonic life points to a more recent relationship to the climbing quadrumana, are only a few of the more obvious facts that confirm this law.

Even after birth the human infant presents numerous structural and functional affinities with quadrumana. The strong grasp of very young infants, the inturned soles, the wide space between the first and second toes, the equal length of arms and legs, are all survivals of the structural adaptation to climbing that finds its psychical counterpart in the stair-climbing instinct that all children exhibit when hardly a year old. The fondness of young children for sugar, fruits, and nuts, their strong dislike for clear starches and meats, and especially their loathing for animal fats, point to a fruit-eating, tropical ancestry not vet driven by pressure of numbers to colder climates and a carnivorous dietary In the structure of the the teeth, man agrees with other fruit-eating mammals. The brutal delight that most untaught ten-year-olds of both sexes seem to take in teasing, maining, and killing flies, spiders, worms, toads, turtles, and other wild creatures finds a natural explanation in the life and death struggle between early man and his four-footed competitors. The fear of snakes and dread of darkness that most children exhibit are not in the opinion of the writer due wholly to education, They are in part, at least, instinctive. Dr. Felix Oswald suggests that arboreal serpents and carnivorous nightprowlers are even today the deadliest enemies of the monkey tribes.

Any person that has, on other grounds, become convinced of the substantial unity of the physical and psychical life, and that holds to the reign of law throughout the universe, needs no facts in addition to mere biological evidence to persuade him that Von Baer's law must hold in our mental development. To such person the Culture Epoch Theory is a necessary corollary of the foregoing propositions. Yet this theory is established and corroborated by a multitude of psychical phenomena that find no other adequate explanation. Foremost among these we place the phenomena of instinct. [For a presentation of this evidence the reader should consult James's Psychology, Vol. II., p. 383, or the more detailed accounts of Spalding and Romanes.]

An instinct is the faculty of acting so as to attain certain ends without previous knowledge of the ends. An instinctive act is due to an inherited nervous adjustment which reacts at the appropriate stimulus. Every infant is a bundle of such preorganized reactions. The habitual acts of the parent build up a nervous mechanism; the child inherits the mechanism with a tendency to perform the act under suitable conditions. Man is endowed with more instinctive impulses and instinctive interests than any other animal, for his ancestors have engaged in a greater variety of activities, have busied their brains with more kinds of knowledge.

Most instincts are transitory They ripen at a certain period, prompt us to act, if conditions are favorable, then fade away. If the instinctive acts are performed they give rise to a habit, and subsequent acts of this class are to be regarded as habitual and not instinctive. If habits are not formed when the instincts ripen, they are rarely formed at all. The so called cases of inherited genius manifested in such families as the Booths, Bachs, Adamses, Darwins. Rothschilds. Jukes, are to be attributed to the transmission not so much of the mere original endowment as of that endowment re-enforced and strengthened by the habitual acts of the elder members of the family. Every teacher knows that the children of skilled mechanics, as a rule, take kindly to mathematics and physics, lawyers' children to historical studies, doctors' sons to natural science. The greatest obstacle to the elevation of the colored race is the lack of inherited aptitude for the higher activities of civilization.

The great thing in teaching is to seize the happy moment when the child's instinctive interest in the subject is at its height, so that he may gather a stock of knowledge and acquire an habitual interest whose momentum will carry him along after the inherited interest has died out We may possibly discover these happy moments by close observation of the child; probably his individual characteristics and possibilities can be discovered in no other way. It is folly, however, to ignore the aid that the study of race development affords.

The instincts due to the special activities of our fathers come to maturity after those due to our grandfathers. In childhood, life is all play and fairy tales; in youth we hunt and fish, revel in the exploration of nature, in travels, and adventure; in middle life we are swallowed up in the moneygetting activities of the modern world.

The fullest and best life is the life that in each epoch fills itself to saturation with appropriate mental food. The appropriate food for each of our spontaneous interests is the mass of *ideas* that engaged the ancestors to whom the activity is due.

In some quarters the fear is expressed that a course of study planned in accordance with the culture epoch theory. must result in arrested development, by holding the child in stages of development, through which he should rapidly pass. This fear ignores all the analogies of our physical development. Starches fed to a three months-old infant, pass through the body unchanged. Their presence only ir ritates Yet the starches, which will kill an infant, and the animal fats that the four-year-old rejects, are the main ingredients of the adult bill of fare. The infant desires milk; the child, sugar and fruit acids; and the wise parent knows that the most vigorous adult is reared by giving an abundance of suitable food at the several stages, not by crowding on the infant the diet of men. There is no fear of arrested development, because the child is fed apples and not bacon.

We may be equally certain that strong intellects are reared by providing an abundance of palatable and nour ishing mental aliment at every stage of growth. Youths that are boys in boyhood are men when they grow up. Let the boy revel in the plays and sports of childhood and adolescence, read the books he likes, feed each intellectual in stinct as it ripens with appropriate food, lead an intense and vigorous life in every stage, and there must result not the one-sided growth of the book-worm or recluse, but an all round development, the perfect man, interested in nature, interested in every worthy phase of human life.

IN REPLY TO SOME COMMENTS ON THE CUL-TURE EPOCH THEORY.

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In following the various comments that have been called out by the doctrine of the Culture Epochs during the past year, and in reading the papers contributed to the foregoing symposium on that subject, I find two assumptions advanced almost universally by opponents of the theory (1) That the theory is regarded by its advocates as a finality, requiring no further substantiation; (2) that there is no limit to the assumed parallelism between child and race. As some refutation of the first, I may call to mind the attitude of this Herbart Society in calling for the opinions embodied in this symposium. If brief, however, I wish to say that advocates of the theory have never maintained and do not wish to foster either of the above positions. Both are preposterous; neither is at all essential to the value of the theory in education. We would substitute for those positions two others: (1) That the Culture Epoch Theory is still open to, still needs research into child-life, research into the history of culture and human growth and a careful test in the comparison of these two; (2) that in view of its present, by no means insignificant, strength, it is a principle of great pedagogical suggestiveness and value. In still another respect the discussion has taken a rather narrow course. Almost all illustrations as to application are drawn from the field of literature and history, thus tending to narrow the conception in its psychological significance. Probably the defenders of the theory are to blame for this. since their discussions determined the line of illustration that followed.

In this article, then, it is my purpose, in the light of such motives as have been stated above, (1) to reply to some of the comments contained in this symposium on the Culture Epoch Theory, and (2) to indicate briefly somewhat of the variety and character of the application of the theory. For any extended defense of the doctrine in question I must refer to the article, The Culture Epochs, in the "First Year Book" of the Herbart Society published in June, 1895.

I. I turn to Prof. Hinsdale's thoughts concerning the "Colossal Man." (1) I am not inclined to place a greater emphasis upon bare authority than does Mr. Hinsdale. The extent to which it carries any force is limited. Still we always concede some weight to authority. Realizing this, Mr. Hinsdale seeks to remove somewhat of the weight of authorities that have spoken in behalf of the Culture Epoch Theory by suggesting that many of them ("the great majority") have undoubtedly used the conception merely as an "effective metaphor." Making this statement, it would have been fair to show that this is the case with the authorities cited by Prof. Rein, or by myself in the First Year-Book. Instead of this, two authorities were cited, neither of whom have been quoted as such by recent advocates of the doctrine. That the conception has been used as "effective metaphor" can not be gainsaid. My acquaintance with Rein's authorities, however, tells me that they are hardly open to this objection.

(2) The series of questions concerning this doctrine which Mr. Hinsdale puts, seem to me to strike right at the heart of the problem. They are the questions on which a great deal of study and research has been spent, and much more is to be spent. But it will require more than the mere assertion that the theory has no educational value, (merely because it re-emphasizes a movement already begun before we were conscious of culture epochs,) to silence its pedagogical claims. I find a large share of Mr. Hinsdale's comments devoted to the elaboration of this assertion

(3) Quite apart from the question of the raison d'elre of Herbartian pedagogy, when its acts are misquoted, it may justly enter protest. Prof. Hinsdale says: "Ziller, who was the first to work out the scheme, made his early school course wholly humanistic, thus entirely ignoring nature-stuff." In

the light of the culture epochs, that were, indeed, a grievous error, but Ziller never committed it. If the reader will turn to Ziller's "Leipziger-Seminarbuch" (re-edited by M. Bergner, Dresden, 1886), the only ultimate authority on this point, on pages 21 and the following, he will find that from the first grade on Ziller provided abundantly for "nature-stuff" of all kinds. And he will be struck by the fact that thirty and more years ago, Ziller gave a prominent and liberal place to nature study in all grades, teaching from the object and utilizing the excursion. When the history of Herbartianism has been fully told and is better known, we shall begin to understand what it has really contributed to the educational movement. Furthermore, I know of no Herbartian curriculum, ever planned, that did not liberally recognize nature-study.

(4) The advocates of the Culture Epoch Theory have never, as Mr. Hinsdale affirms, claimed a complete parallelism. To do so, would be to remove all recognition of individual personalities in education, for all individuals would then be mere copies of a pattern. This perennial criticism is very like a quarrel with the doctrine of recapitulation in evolution, because the mammal, for instance, does not fly in the air and swim in the water a little, ex utero, so as to make the recapitulation more perfect. When the theory affirms the parallelism, it by no means seeks such an interpretation as would destroy all individuality. Conformity to type, the basis of social relations and progress, does not mean the engulfing of the individual.

(5) The tasks involved in the formulation of the curriculum, as conceived by Prof. Hinsdale, seem to me for the most part too indefinitely stated, to give valuable suggestion. "Study with equal care the various studies considered as education-stuff." How does such a study differ from any other study of these branches? What determines which one of a variety of possible points of view shall be chosen from which to regard "education-stuff?" Or, since there is no pedagogical virtue whatever in the Culture Epochs and the Colossal Man, by what right shall we exclude the historical survey of the growth of culture and science? "Discover, by careful com-

parison and verification, the adaptation of these studies to mind at its successive stages of development." What if in answer to this imperative "discover," we were to discover the . wrong thing,-the Culture Epoch? What is there to guarantee, to the subject-matter of instruction, skillful adaptation to the succession in the child's development, if it is not an innate correspondence between the child's needs and the characteristic power which that material must demand of him. Such a solution the Culture Epoch Theory has in mind. Mr. Hinsdale assumes a conflict between child-study and this theory. No such conflict has shown itself; on the contrary the former has revealed the child still recapitulat. ing not only the great movement of racial intellectual progress, but many of man's early interests and instincts that were incidental to the main movement and which in civilization might well fall into complete dessuetude. Furthermore, child-study has worked consciously on this problem (Hartmann, Large, Capesius).

(6) We are arraigned for resorting to psychological grounds in support of the theory. It is true and quite natural, since these arguments are on our side. Again, the theory is a psychological problem; what grounds should we seek? The Culture Epochs are a part of the doctrines

of apperception and attention.

(7) If in opposition to much that Mr. Hinsdale has said, I should state broadly something positive it would be this: The great pedagogical value of the Culture Epochs lies in the fact that they open up for us in more definite form the possibility of utilizing the history of culture and science in our method of teaching. I have alluded to this more in detail elsewhere in this article. Hence I must differ with Mr. Hinsdale when he assumes that the Culture Epoch Theory has nothing new to offer. What the history of science teaches us as to method in instruction has not yet begun to be utilized.

II. Some words in reply to Prof. Galbreath. Mr. Galbreath rightly calls attention to certain limitations that must be placed upon the theory of the Culture Epochs as a principle of practical pedagogics. In his statement of the

theory, however, he hardly does justice to its claims.
(1) He makes it appear, to begin with, that the theory rests wholly upon assumption, a proposition that places all who are soberly engaged in the discussion of the principle, in a somewhat unenviable light.

- (2) One of the first arguments which Mr. Galbreath directs against the theory is based upon the assumption that its application would exclude sufficient breadth and variety of material, for "many sided growth demands a broad survey and selection of subjects of instruction." The words just quoted contain, I believe, self-evident truth; but an application of the Culture Epoch Theory need conflict in nowise with its requirements. There is a time in the life of the child when he is concerned (and fitly concerned) with a comparatively narrow path of activity determined by a few instincts and appetites and by a limited field of sensation. This narrow path is his first educational blessing. what you will, he will select from the broad field of possible impressions and activities, at first very narrowly, and ignore the rest. This is his safe guard. Gradually, how ever, his world of experience becomes more and more differentiated, so that when he enters school his interests and activities already have a much broader range. Earlier stages have been passed. But we should note that this very idea of "many-sided growth," whose importance Mr. Galbreath justly emphasizes, is incomplete until we add to it the conception of "progressive many sidedness," and realize its great relativity in application.
- (3) A further proposition, advanced by Mr. Galbreath, is to the effect that the genetic principle conflicts with the "necessities for apperceptive relationships." On the contrary it is a more complete recognition of the possibilities of the doctrine of apperception in application. That is a narrow view of apperception which limits its significance merely to the intellectual sphere. The power to apperceive rests, not alone upon the intellectual aspect of mental activity, but equally upon its emotional and volitional aspects. This is, indeed, the very weakness in education for which the Culture Epoch Theory suggests, at least, a rem

edy. The fact, already revealed by child-study, that there is an ebb and flow of interests and instincts, that they present a certain succession, is too little regarded by education, as yet. Yet anyone, who has watched the effects of predominant interests or instincts, in child or adolescent, knows that they are unexcelled in their power to influence and determine the course of intellectual growth, and hence apperceptive processes.

Mr. Galbreath also fears that the genetic principle will do violence to the pedagogical movement from the simple to the complex. Certainly he will not deny that in the instruction of children, these terms "simple" and "complex" have but a relative significance; that any object of instruction becomes simple or complex to the child, according to the end the teacher has in view in presenting it. It is the teacher who determines whether the "robin," as an object of instruction, shall be at first relatively simple or complex. The teacher bases his decision as to the desirable simplicity or complexity on the child's stage of mental development. The Culture Epoch theory would seek always conformity of the material to the child's stage of mental development. Wherein, then, do they conflict?

(4) What is the relation of this theory to "objective and observational training?" This question touches vitally the whole problem of selection and succession of materials in natural science. I can but indicate what the child's nature seems to me to require. As Mr. Galbreath says, here the child is limited to the natural stimuli of his immediate environment, which differs from that of the race. True, so far as the individual sense elements are concerned. But the outcome, the scientific system, the great scientific laws, the great explanatory hypotheses,—are the common possession of the race developed in its past history. They are implicit in any environment, -the educational end in investigating any environment. The child, limited by certain stages and conditions of mental growth, must approach them as did the race by a great experiential and inductive movement. We gain nothing by early and hastily advancing theories. We long to hear the child say that "the earth is spherical," that in the plant, "organs of reproduction and floral envelope are but metamorphosed leaves," forgetting that such science can be to him for some time but the traditions of authority, and that love and reverence for nature, familiarity with her varied and individual manifestations, and with her life biographies and life groups must precede all system-building and theorizing.

There is a time in the life of the child, I believe, when the Ptolemaic conception, i. e., a conception based upon the apparent astronomical relations, is preferable to the Copernican. The latter has its place only as soon as greater familiarity with detailed astronomical phenomena has revealed inconsistencies in the old impression. The erroneous impression is an essential and valuable step in securing the right conception. In the same way, I believe the best method of securing an appreciation of scientific truths is by helping the child to reproduce the essential conditions, ideally, under which the truth was first discovered. History, then, can teach us how to teach. We have not begun to utilize the history of the development of science in practical educational work.

- (5) Mr. Galbreath's assertion that little or nothing has been done by way of analyzing racial and individual development is hardly justifiable. While my own article in the first Year-Book was able merely to epitomize this analysis, it was followed by valuable references among which are to be found works devoted especially to that task. There is room for further inquiry, I admit, but a great deal has been done.
- (6) Mr. Galbreath conceives the culture epochs to be in conflict with the modern civilization and modern ideals, to which the child must adapt himself. But culmination in modern civilization and a realization of distinctively modern problems is the aim which the application of this theory keeps steadily in view. They would be incomplete without it. Shall we forget that modern civilization is a growth? What is the implication when we give it the adjective, "modern"? That it is modern by comparison. That its significance to us depends upon the well expanded and cultivated histori-

cal consciousness. The culture epochs did not terminate in a distant past; they comprehend today.

(7) Finally, for purposes of comparison, let me state my view of the six points with which Mr. Galbreath sums up in closing. (a) The theory does not magnify an assumption, but a principle that has received candid and careful study and research; neither does it "shape the individual regardless of," but, on the contrary, by utilizing, at every step, the environment. (b) It in no wise conflicts with the use of thought-materials drawn from environment, but both insists on the humanistic and natural environment (not one to the exclusion of the other), and in addition calls attention to the characteristic mental processes through which these materials must pass. (c) It points, not to the source of culture, but to the practical and ideal outcome of culture as seen in the modern social organization, by way of cultural development. The child is constantly led into the real world. The theory emphasizes thought-content, and not mere form. (d) An application of the theory without observation and manual training would be preposterous and impossible. Did the race rise without any sensation or motion? Let us not have literature alone in mind when we speak of an application of this theory. (e) The theory determines ends and means of instruction to but a very slight extent: its chief effect is seen in the succession of materials in the curriculum and in the method of instruction. (f) It does not minimize the philosophy of instruction, for it is a part of it. It has never sought to determine the end of education; it rests on many results of modern psychology, it is itself in part a question of physiology and psychology, and its application would only be consistent and possible in the light of modern ethics and sociology, for, as an historical conception, it embraces the present in its movement.

III. I believe that Dr. Lukens' article in this Second Year-Book must stand as the best statement yet produced of the real and significant difference between racial and individual development, and of the reason for that difference. It is to the further development of that thought that we may look for a great deal of help in determining

the exact limitation of the doctrine in educational application. Taken in its broadest sense, we have in this difference which Mr. Lukens has analyzed, but an individual instance of what must be conceded as universally true of the entire theory of recapitulation, biologically and psychologically. It is that from the moment of conception, the individual is stimulated by an environment in many respects unlike that of his colossal phylogenitor. In other words, individual recapitulation is far from being the same as original phylogenesis; it is only true that "the individual relives the life of the race ideally, and not actually." If this fact can be kept in mind it will save us some confusion in discussion.

But along with the above fact, we must consider another Despite his superior environment, the individual is endowed with those selective instincts (fitness to attend to those surrounding stimuli that will further its development) that after all render it more or less independent of its physical environment, and that constitute a sort of negative safeguard. The environment, as to the quality and, in part, quantity of the images it offers, is never more to the child than his stage of mental development will permit. Most of all do we err, when we assume the identity, or even the congruence, of the child environment and the adult environment. It is this consideration which always commits me again to the conception of recapitulation. Making use in. part therefore of Dr. Lukens' phraselogy, I think the educational problem involved in this theory may be stated as follows:

How shall we best supply those conditions of growth at the different stages of the child's development (for these are our primary guide) that will most fitly enable him "to relieve the life of the race ideally," to "touch the experience of the race at all points though not having to act it out," in full?

IV. Why thus "relive the life of the race?" (1) Because a very large body of culture, which is due directly to the phylogenetic and historical development, displays successively psychological of development that are repeated in

the child. (2) Because the significance of this culture is due to the possibility of historical comparison. The race is today conscious of distinctively modern problems only because it has grown into these problems, because it has seen them evolve out of the past, the outgrowth of earlier stages; in the same way must the child grow into and become a participant in the problems of today. (3) Because we are bound to adapt to the stages of development in the child all so-called modern culture.

It remains for me to indicate briefly some of the lines along which it seems to me we shall be benefited by seeking an application of the theory. Nearly all of those conversant with the recent discussions of the Culture Epoch doctrine will be acquainted with the proposed application to literature and history. Further illustration in this field is hardly necessary. A double benefit is to be noted in such application, however; (1) the closer sympathy between child and material, and (2) a progressive familiarity with, and interest in, culture products that are still greater factors in modern civilization. The past is ever present. The present is a growth into which the child is to grow.

Similar advantages accrue to art instruction. Not only may the child find sympathetic material of fitting simplicity, but he gains power in the interpretation of the culture products of art that surround him, a thing too often neglected in modern art instruction. Such a series of studies in art, e. g., as Rein uses for the boys of his Practice-School at Jena, drawn from the art relics of ancient Egypt, Greece, and Rome, and finally of mediaeval and modern Europe, introduced after the child has experienced the first stage of rough graphic sketching, not only offer sympathetic psychological conditions for work, but lift them gradually to the level of a higher modern development, reveal to them elements in modern civilization that must otherwise remain a sealed book.

In replying to Mr. Galbreath, I have already indicated how the Culture Epoch Theory would affect the teaching of natural science. In both its broad movement from the individual manifestations of nature in their effects upon the sensory and motor activities of the child, toward hypothesis, system, and applied science, and in utilizing the history of science by supplying successively the conditions under which the knowledge is first revealed to the mind, the theory exerts no insignificant influence. I may refer also here to the article in the First Year-Book in which Dr. O. Beyer's work is mentioned; he is there shown to have indicated a still further adaptation of nature material to the native instincts and interests of the child by utilizing the economic stages of development.

Finally in education we are concerned above all with will-development. No more obvious parallelism could be offered than that existing between the volitional development of the race from a stage in which appetites and caprice rule, to one of relative autonomy, and a similar development in the individual. The analysis of this development is given in the article just alluded to. But a large share of will training must be devoted to the presentation of conscious standards of action, and these standards must recognize in their successive arrangement the stages of will-development. Again we find the genesis of culture supplying this succession of desirable standards.

PRESENT STATUS OF THE DOCTRINE OF INTEREST.

BY CHARLES DE GARMO, PH.D., PRESIDENT OF SWARTH-MORE COLLEGE.

Controversy arises when new ideas are introduced or when old terms become charged with new meanings. For eighteen months the controversy concerning the ideas and terms introduced by members of the Herbart society has centered mostly about the word interest. It is true that correlation has received much, and the theory of culture epochs some, attention, but active opposition has been confined mostly to the interest idea.

The first charge made at Cleveland, was that Herbart used the idea of interest, or desire, to patch up a defective psychology, that he had omitted the will from his system and had simply fallen back on desire to bridge the chasm. This being granted, it was urged that the Doctrine of Interest is a dangerous heresy likely to bring about serious deterioration of school work, if not to undermine character itself.

The members of the Herbart society, confident in the strength of their position, but without feeling called upon to brake any lances in behalf of Herbart's psychology, asserted the validity of the doctrine of interest quite irrespective of any system of psychology. No psychology is valuable except in so far as it is true; so that if a system can make no place for generous, absorbing, and continuous enthusiasm of mind for those subjects of study that reveal the world to the pupil, showing him his place and power in it, then that psychology itself has more serious gaps than the one it presumes to criticise. This being the case, the Herbartian could calmly await the time when the opponents of the idea of interest should be com-

pelled to accept it as a necessary consequence of their own system of thought. All that was needed was time for assimilation.

Shortly before the Jacksonville meeting of the superintendents' section of the N E.A., in February of the present year, Dr. John Dewey's monograph on Interest as Related to Will appeared as the second Supplement to the First Year Book.

This scientific analysis of the problem removed the doctrine of interest forever from the imputation of being the illegitimate child of psychological heresy. The unnecessary antithesis between interest and effort was clearly revealed, and their rational synthesis shown to be possible. When the interest that attaches to the end (for instance, a day's wages,) is divorced from the means (the labor), then we have drudgery; when the interest in the end (say the acquisition of power) is attached likewise to the means (the studies that produce it), then we have true work, the kind of labor that Stevenson meant, when he said: "I know what pleasure is, for I have done good work." "If," says Dr. Dewey, "the interest is wholly in the end and not at all in the means, there is nothing to insure attention being kept upon the means, and hence no way to guarantee the reaching of the end. The mind is not really on the work. The agent is not taken up with what he is doing. Hence, so far as he is concerned, it is a mere accident whether or not the end be reached. The break in interest between means and end marks, in other words, a break in the self-On the other hand, if the means are recognized truly as means, if they are felt to be simply the way in which the end presents itself at the particular moment, then the full interest in the end is at once transferred to the so called means." From this point of view it is clear why pupils should attain a warm, abiding interest in their studies, for studies are the means whereby the ends sought by education are reached. Not to awaken interest in them is to transform into drudgery what should be true work.

One reason why so many teachers instinctively rely on the "effort" theory as the antithesis of what they conceive to be the theory of "interest" is doubtless due to the fact that they conceive education to consist of a drill in forms from which fresh, stimulating thought has been abstracted. This formal drill on reading, spelling, arithmetic, and grammar can be executed daily without exciting any interest more permanent than that obtained simply by making the mind alert.

It has not always been seen that the Herbartian view of interest involves the idea that the true basis of intellectual training is a body of valuable concrete thought, which shall itself stimulate mental growth, not only in the direction of formal alertness, but also in the enlargement of the mental horizon, the development of insight into social and moral relations, the cultivation of moral disposition. Teachers unable to conceive education as other than the mechanical acquisition of a few tools of knowledge, have naturally scoffed at interest as a poor substitute for duty and work. But with the growing comprehension that education needs a thought content as well as mechanical drill, many who came to scoff remain to pray.

At Jacksonville the note of opposition changed. From a standpoint quite different from that of Herbart's psychology, Dr. Dewey showed the psychological soundness of the idea of interest, so that Herbart's peculiar system was elimenated from the controversy.

It was then said that the Herbartians had neglected to distinguish between good interests and bad, which charge was perfectly true. They had been talking about awakening a direct and permanent interest in the studies taught in the schoolroom and assumed that such interest might be presumed to belong to the category of things called good. To this charge Dr. Charles McMurry made the sufficient answer that if we had faired to acknowledge that there are bad interests, so had our opponents failed to recognize that there are also good ones.

The psychological objection to the doctrine of interest being eliminated, and the correctness if not the importance of the second, being acknowledged, we may fairly claim that the truth of the principle has been established. This is, however, only the starting point. We have simply agreed to start along a certain line on a voyage of discovery. What we shall find and how we shall find it remain for the future to disclose. Nor should it be forgotten that the doctrine of interest is not by itself an educational creed; it is simply an angle from which the other elements of an organic whole may be viewed.

LITERATURE IN THE HIGH SCHOOL.*

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I have been asked to discuss the subject of literature in the high school. In doing this it will be necessary to consider what the study of literature is by nature fitted to contribute to education, what forms of literature are best adapted to attain the desired end in the high school, and how the forms actually chosen may be best presented.

By education, as I am using the term here, I mean the complete training that life gives us, or ought to give us, the training of the complete man, the development in due relation to one another of all sides of his nature, the training by which the child-animal is aided to become the thinking, feeling, willing man, and to relate himself to a world of thinking, feeling, willing men. What the study of literature can properly contribute to this development depends upon the nature of literature. And what is literature? How is it itself related to this world of men in which we must help boys and girls to find themselves and their places?

We may perhaps approach a clearer conception of literature through negatives. Literature is not history, neither political history, nor military, nor literary. Further, literature is not science, nor theology, nor ethics. Literature nevertheless grows out of the life history of a people, presupposes the current scientific theories, reflects the philosophy of its time if that philosophy is more than a mere abstract system, if it has any hold on a people, and reveals the ethical, religious, and theological ideas of its age, with due allowance in all these cases for the individual element. Literature grows out of life and deals with life, with human relations, relations of man to man, of man to nature, of man to the Universal Life.

The author's aim in dealing with life is not didactic; he does not write to teach a specific lesson. He writes

[&]quot;C pyright 1996 by J Rose Colby

rather to express himself, to assert himself, to interest, to give pleasure, to make money, perhaps. But not all who write with these motives, or with any motives, succeed in finding readers, get themselves accepted even for a time as writers of literature; few find acceptance for more than a generation or two; very few survive a hundred years; and the fingers of a hand could almost keep the tally of those who have mastered not only their own age and land, but all ages and lands, who remain forever young, contemporary with all time. What is it, then, that these few have had in themselves and put into their work that has made the world recognize them and hand their work down from age to age?

Well, first of all and last of all, I suppose, they have had something to say that in itself is interesting, and they have said it in an attractive manner. They have had something to say of interest not merely to their own age and country, to their countrymen and contemporaries, but to men everywhere and always. Now, the thing that all mankind is always interested in is itself. There is in mankind an immense and justifiable egoism. He who will speak to man of man himself, and speak luminously, will find hearers. If he tell man the truth about himself he will keep those hearers. If the truth be bitter, men will revile the truth teller, neglect him, let him perish miserably, but back they will come to his truth sooner or later; for the one thing sure of final acceptance by the human spirit is truth, the one thing that can afford to wait, afford to be ridiculed, to be rejected again and again, is truth. The soul eternally gravitates toward truth. The great writers have been the great truth tellers. And in the mmor writers, the measure of their worth has been the measure of their power to see and reveal the truth.

To see and reveal the truth, I say. To make a man a great writer, it is not enough that he see the truth himself; he must be able to reveal it. And the condition of effective revelation of truth in literature add the arts, if we may trust experience, seems to be beauty. Beauty, I am apt to think, is but truth become visible, audible. Truth and

beauty are but manifestations of the life that is at the heart of things. Essentially one, they cannot be isolated from each other without loss to each. The truth that is not made beautiful in the telling, the beauty that is not true, loses half itself, is but half revealed, can have but half its rightful power over man.

But great and beautiful truth telling is rare. Accordingly mankind has judged few writers great. As the ages have passed man has let go book after book which struck his fancy for a time but which embodied too little truth, or embodied truth in a form too imperfect and distorted to hold his permanent allegiance. But at the same time he has clung with instinctive loyalty, with something like reverence, to the treasures of truth and beauty in the great books of the race; and furthermore, he welcomes, keeps, and honors in their degree all works that offer him something of truth and beauty for the nourishment of his spirit. These books are gifts of the seers and the prophets of the race, and they alone have the right truly to be called literature.

Let us see now to what point this brings us with reference to the teaching of literature. If literature deals with life, if to be literature at all it must deal with life with some truth and with some beauty, and therefore with some power, and with the more power in proportion to the truth and beauty, what shall be our purpose in teaching literature? what books shall we take as the basis of our teaching? and how shall we teach?

1. Our purpose follows as a natural consequence, does it not, of the nature of literature and of the pupil. We wish the pupil to perceive the real nature of literature and to love it, to find in books a lasting resource. We should seek, therefore, through literature to initiate the pupil into ide, to introduce him into a broader life than that of the individual, to help him to see life in its complex relations, to see life in its beauty; we should seek to quicken his sensibilities to moral and physical beauty, to give him new and pure sources of joy, to help him to find himself in the life of nature and the life of man, to help him gain possess-

sion of himself by bringing him to a knowledge of his own nature and of the relations in which that nature itself involves him; to help him, in short, through the knowledge of man's life and sympathy with it, himself to be a man.

To answer the second question, What books shall we take as the basis of our teaching in the high school? we must look again to our pupils and this time consider more

carefully their stage of development.

When boys and girls enter the high school what has already been done by the world in which they live, -their homes and the social life there, the church, the school, and their own physical development,-what has already been done toward making them men and women? They enter the high school, seldom under the age of thirteen, seldom over the age of sixteen, the great majority probably in their fifteenth year. The child world has been left behind though it still lies within easy vision; the adult world is dimly seen ahead, and is at once ardently longed for and shrunk from, sometimes with timidity, sometimes and for a time with absolute aversion. The questions the child is perpetually propounding while he is still so new to the world that he feels most things as mysteries and few things as commonplaces, have given way largely to new perplexities about his own life, to a new curiosity about the world of men and women, to the beginning of a new wonder about the world as a whole, the origin of it, the destiny of it, the meaning of it. The social feelings are changing; new impulses often troublesome and bewildering are coming with the beginning of youth; a new sensitiveness to the influence of persons is developed; and a keener sensitiveness to beauty is springing up, while at the same time the conflict of impulses, the inrush of new emotions and ideas, is making the youth awkward and ugly in his own eyes, a new self-assertiveness appears, hiding often a real modesty; a new indifference to the wishes and opinions of others, hiding often a shy but eager desire for sympathy and approbation. The childish readiness to ask questions, to lay perplexities before adults for explanation, is either past or intermittent. The readiness to take explanations on authority is greatly

diminished. The world is pressing in on the young consciousness in a thousand new ways, his own nature is becoming consciously a riddle to him, he is more eager than ever to know the world, to ask questions, to get help from those older than himself in solving his puzzles, and at the same time he is shyer than ever before about asking help, shyer especially of those older than himself, shyest of all, perhaps, of those of his own household.

What books shall boys and girls in this stage of development be given to read with a teacher?

They are first of all hungry for life. Let us give them books with life in them, then. Let us take books that have enough life in them to keep them sweet for a whole generation at any rate. To make sure of that, we shall do well to take books that have already answered the needs of a generation of men and women. They are next hungry for the truth about life. Let us give them books, then, that are true to life, to the heart of it and the head of it, books that show them the very stuff of life, love and hate and friendship, wonder and awe, hope and fear and pain and joy, righteousness and unrighteousness, and the mexorableness of law. Finally, they are hungry for beauty in life. Then, since we hold life to be beautiful and sweet, spite of all the pain of it, let us give high school boys and girls books that reveal the truth of life in beauty, books that are themselves beautiful.

But now a word of caution. Boys and girls are eager for tife and truth and beauty, and rightfully eager, and it follows that we must give them books that will satisfy this eagerness. Very well. But it does not follow that they are ready for all the books that to our notion contain life and truth and beauty, or even that contain these in fullest measure. I have spoken of the shyness, the sensitiveness, the awkward self-consciousness of boys and girls in the earlier high school years, and these things must be taken into account in our choice of books for them. Boys and girls of this age are indeed eager for the truth about life, but they shrink from direct personal speech about it with their elders, including their teachers. Above all, they are shy of

speech that seems to them to make public in a personal way their own emotions and the ideas they have formed of life, their theories, their admirations, their desires. They will turn from the direct, personal speech of others to them where such things are involved, turn with distaste, with a sense sometimes of profanation and disgust. And at the same time they will seize with eagerness any incidental, impersonal word that throws light on their own lives or the lives of others. This shyness, this shrinking, which in part is mere ignorance and awkwardness and excessive selfconsciousness, but which is also in part made up of instinctive wonder and reverence, must be treated with respect Books may violate it. Books which they may even now read eagerly in private and which two or three years later they will even be glad to read and discuss in class, they will now turn from in class and think "queer things" to read there. Almost all novels, by their subject matter and their manner of treating their subjects, are brought under this head of books that it is not wise to introduce into the first two years, at least, of the high school.

I say, by their subject matter novels are excluded as well as by their manner of treating their subjects, and this is true in part. Yet it is more certain that it is their manner, their form, that naturally shuts them out of our choice here. The personal tone, the direct speech, the familiar form of dialogue, the closeness to the tone of daily life, found in the novel, make boys and girls of this age almost as self-conscious in discussing situations and problems in novels as they would be in discussing the same problems and situations in their own lives. To ask them to do this before they can do it in an impersonal way, without excessive shrinking and awkwardness, is to do them a lasting injury. And yet, while the novel is too familiar and personal, most other prose that might otherwise be chosen either lacks the truth and wealth of substance and beauty of form that are required, or is too difficult, too abstract, too far removed from the life and experience of first year high school pupils to serve our purpose best. We wish to satisfy our pupil's eager desire for the substance of life

without alarming his shyness and intensifying his selfconsciousness. We wish to lessen his shyness and selfconsciousness by turning his thoughts from the direct contemplation of himself to the contemplation of life apart from himself yet felt to be akin to him. We wish to satisfy and develop his love of beauty by giving it beauty to feed on. We wish him to feel the reality, the truth of what he reads, its nearness to his own life, and its beauty, and yet we wish him to find something in it that shall serve him as a shield of impersonality. These conditions seem to me to be better met by poetry than by almost any prose.

Poetry that is worth the name comes straight from the heart of life and gives expression to the simplest and the subtlest emotions. It is at home in the whole range of human experience. It is a transparent medium sensitive enough to mirror the shadowy images that flit fugitive across the surfaces of thought; and it is the hard granite that holds through ages the forms struck out by sculpturing passion. Poetry supplies therefore that substance of life which is the first thing we demand for our pupils. And it is true substance. For poetry is sincere. What the man has found life to be, face to face with it, masks off, this the poet has put into his verse, and it is this alone that the world holds fast.

But we can say more even than this. Poetry more than any other form of literature tells the truth in beauty. Its life beats with the rhythmic pulse of the universe, it speaks with all the tones of the winds and waves, it catches the very bird notes and the flutter of wings, it knows all the voices of human tear and love and laughter. It makes its own the shadows of guilty night, and the hush of starlight and quiet noon. It comes nearest of all the forms of human speech to giving utterance to the life that is at the heart of man and at the heart of the world. It does this because, while it shares with prose that mastery over words which compels words to render thought with exactness, it, far more than prose, shares with music that power over sounds and rhythm which makes possible the expression not only of thought but of the emotion that accompanies it.

Poetry therefore answers our demands for life and truth and beauty. Does it also answer our demand for something that shall serve our pupils as a shield of impersonality and thus enable them to lose their painful self-consciousness, to lose themselves in the narrow sense and find themselves again in the broader world of literature? I think it does. Poetry is the most personal speech of man, the most direct and intimate. For this very reason it ceases to be merely individual and becomes universal. This tone of universality, while it makes the reader feel at home and at ease, does also call him out of himself. uneasy sense of himself, his sense that others are thinking of him, vanishes. He gives himself up to a wider life and lives in it without embarrassment. The beauty also of poetry and its characteristics of form by which it differs from common speech, tend to the same end. All beauty calls us out of self-centered thoughts and attaches us to the world through admiration and reverence. The rhythms of poetry, so different from the rhythms of speech, at once take us out of our habitual moods and bring us as it were into a new harmony with this rhythmically constructed universe. The harmonies of sound, of which the poet is as subtle a master as the musician, exercise the same sway over us in poetry and in music. Through their power we enter the world of emotion and live there without shamefacedness. All thought and all emotion in poetry, while remaining sound and true and natural, take on an ideal character, are seen to be elemental. We take them to ourselves, we share them with others, with far less awkward self-consciousness than if we had found them in prose. For this reason, then, as well as for the wealth of thought and feeling it offers, it seems well that much of the literature we read with our high school boys and girls should be poetry.

Just what poetry we shall give them at first will depend on several things; more especially it will depend on what they have already read at home and at school, and how they have read. And yet this makes less difference in choice of authors and method of presentation than in what can be done in an allotted time. Even if boys and girls bave read much at home and in school, even if they are fairly familiar, for instance, with a good deal of Scott and Longfellow and Whittier, with something of Bryant and Lowell and Holmes, and perhaps a little of Tennyson; or if by great good luck they know something of Wordsworth or Coleridge and Cowper and Burns or Matthew Arnold, and a few ballads and famous pieces of verse by various authors, our choice need not be restricted by reason of this, nor need we shut out authors and poems already familiar. But as homes and schools go, it is a rare first year boy or girl in our high schools that knows much more than the names of the English authors mentioned above or indeed has much more than a speaking acquaintance with the American.

We shall do well, I think, if we choose for our first reading with them either Scott or one of the American poets. In this we should be governed largely by our own taste. If we read Scott with enthusiasm, if we delight in the vigor, the energy, the manliness of his verse, we shall probably not find it hard to make our classes rejoice in the same qualities as we read The Lady of the Lake or Mar-And if we have in our classes boys or girls who imagine they do not like poetry, who think it is necessarily merely "pretty" stuff, or "silly" stuff, and who like adventure and excitement, we may even find it well to defer mets we ourselves prefer and read Scott first. Our own taste should be our guide also in great measure when we select from our American poets, for it is impossible to teach poetry well unless we ourselves thoroughly enjoy it. No pretense of enjoyment, no enthusiasm put on for the occasion, will serve. The class will detect the sham, and our usefulness will be at an end. But whichever we choose, we shall do well to give considerable time to each author so that pupils may grow into a real knowledge of him and friendship with him. The first year will give time for Scott and two American poets, with possibly a little prose for carnety Ruskin's King of the Golden River perhaps, Addlson's DeCoverley Papers, or Dr. Brown's Rab and his

Friends, a leaf or two from the Sketch Book, or a bit of Lowell, his essay on Lincoln or My Garden Acquaintance or On a Certain Condescension in Foreigners

For several reasons I hope Longfellow may be included among authors lived with the first year. The peculiar attractiveness of his poems for most readers, the great variety of his subjects and meters, and the artistic qualities of his verse make him particularly suited for a place early in the course. Then if we may make our own choice for the second year we will take Wordsworth in Matthew Arnold's little book of selections from him, Arnold's own Sohrab and Rustum, add two or three things from Cowper, a score or more from Burns, and if we have no one in our class too sensitive to images of terror and are sure we can bring out the beauty of it, we may add Coleridge's Ancient Mariner Otherwise Tennyson in Lancelot and Elaine will serve us better.

By the third year our classes will be fairly introduced to the world of poetry, though familiar as yet mainly with lyric and minor epic forms. The great epic and the drama we may still defer a little and at the beginning of the third year turn for a time to prose. Burke's speech on Conciliation with America the class will find manageable with some help, or Webster's first Bunker Hill address, or his Reply to Hayne. And in Burke and Webster the pupil is reading great English prose, prose that will give him a new sense of the dignity and scope of plain speech directed to definite ends, carrying easily a burden of thought, and fraught with noble emotion. Or, if something nearer in time than Burke or even Webster is desired, read Lincoln's inaugural addresses, his address at Gettysburg, and Emerson's American Scholar or his essay on Behavior. Then returning to poetry take Chaucer. Read if possible "The Prologue" and "The Knight's Tale." Then, after a little of Spenser if he can be crowded in, the year may be rounded out by the first approach to the novel and the drama. The first novel read in class should be comparatively simple, brief, and artistically constructed. It should not be necessary to add

that it should be thoroughly pure in spirit, since this is presupposed of all books to be read with our classes. I have found Silas Marner the most serviceable novel for the first in class, and either Julius Cæsar or the Merchant of Venice the best introduction for high school pupils to the study of the drama.

The fourth year should see two or three more plays of Shakespeare added to the list, and the great epic taken up in Milton. Finally, in the last term of the course, another novel may be read, Thackeray's Pendennis, The Newcomes, or Henry Esmond, if the teacher himself has ever got at the heart of Thackeray, or one of Scott's chosen at the teacher's pleasure or by vote of the class subject to the teacher's veto.

Throughout the course, a hand-book of the history of literature may be used as a reference book, and authors who are less well adapted for reading in class or for whom we have found no time in our class work, may be assigned for private reading, with class discussion. If the history of literature is taken up at all in class it should be at the end of the course, when pupils have read enough to save the history from being utterly barren, a catalogue of names; when they are familiar enough with the nature of the literature to feel its relation to life, and to understand its development side by side with the development of the English people. Let me add, also, before taking up the method of presenting different literary forms, that it is unfortunate to follow a course in literature year after year without change, In general, classes present much the same types of character and phases of development, and will read the same books with about the same interest; but occasionally a class comes into the high school with unusual needs. The course should be elastic enough to permit the teacher to adapt his work to the actual needs of his class. Even if there were not these exceptional cases, some changes should be made every year so that the teacher himself may encounter the old problems under new forms and not rest satisfled with himself.

Let us suppose now that we have a fairly clear conception in our own minds of the nature of literature and of what we wish to accomplish in teaching it, and that we have arranged a course largely poetic, but containing, nevertheless, the main types, not only of poetry, but of prose. How shall we bring the two together? How shall we make our course accomplish, even approximately, what we are aiming at?

Here I find myself in accord with the views expressed in the report of the Committee of Fifteen. Our goal is essentially ethical, our way to it lies through aesthetics. It is probably not necessary for me to defeud this position, but I should like to develop, somewhat briefly yet rather more fully than that report does, what is involved in this. And since the course here suggested is so largely poetic, I will content myself with considering what is involved in an aesthetic method of presenting poetry.

First, before attempting to teach poetry, one must have not only a love of it but an acquaintance with a good deal of it. Along with this must go some knowledge of the technique of poetry, of the characteristics that belong to poetry in general, rhythm, metre, stanzaic form, phrasing, i. e. arrangement of pauses, vowel and consonant harmonies whether initial, medial, or final,—of tone-coloring in short; and further, some knowledge of specific poetic types, lync, epic, and dramatic, and a fairly clear notion of artistic unity. He should at the least know enough of these things to feel their importance, to have some sensitiveness to what we may call the moods of verse, and to be able to discover the artistic structure of a work. If he has so much even, he is sure to increase his knowledge along these lines for the very delight of it.

With this preparation the teacher will, from the first, distinguish carefully between poetry and prose. Let me put it in the imperative. Never permit pupils to read poetry as if it were prose. To distinguish between a poetic thought and a prosaic thought is not very difficult, but to distinguish between noble poetry and noble prose by comparing the thoughts expressed is extremely difficult. It is not, therefore, on the basis of thought that the distinction is to be made, but on the basis of form. Now the most

fundamental and most easily observed difference in form between poetry and prose is rhythm. Not rhyme—rhyme is not necessary to poetic form, our stateliest English verse is unrhymed; but without rhythm of some kind poety ceases to be itself. It follows that if the pupil is to read poetry profitably, to enter into the secret of it and read it with appreciation and pleasure, he must first be trained to read rhythmically. Of course by this is not meant that boys and girls should be set upon an elaborate study of English rhythms, but merely that they should be helped to feel the rhythm of each poem read until they can easily recognize the simpler and commoner rhythms for themselves, and get such a feeling for rhythm that they shall be uncomfortable in ignoring it in any poem, uncomfortable until they have mastered the swing of the verse in each poem

The prevailing rhythm in English poetry is tamble With this at least, the pupil should not fail to become familiar whatever poets are read. The great body of the work of all our poets is jambic, and some of them, as Scott and Whittier, seldom venture on any other measure, though, of course, they mingle with their tambics an occasional ana paest. Lowell uses the anapaest more freely, and Longfel low presents a much greater variety of verse. His artistic sense arged him apparently, to find the rhythm that in itself is best adapted to the ideas and feelings he wished to convey. The reader therefore needs to follow the movement of his verse sympathetically. The music of Horwatha is sure to be lost, the proper names so numerous in it, instead of suggesting the very voice of forest and river, will be mere unpronounceable hard words unless the reader is sure of his accents in trochaic verse. Many a line in Evangeline reads like poor prose until we are familiar with Longfellow a handen; of the dactyl, and the beauty of the best lines. even to half lost. The dreamy rose and full of the verse in My Last Youth, like the lazy lapping of water on the shore depends upon the anapaest mingred with immines ust as in last mar the long leap of the galioping horse and the bound by triumph are given by a free use of the anamares. The teater, must learn to have an ear everywhere

for time intervals, and to be quick to see where the poet omits his unaccented syllables and depends on the emotion to fill the interval and keep the beat of the verse, as Tennyson does, for instance, in his Break, Break, Break song, With a knowledge of these four rhythms, iambic, trochaic, anapaestic, and dactylic, and a little familiarity with the modifications allowed in them, the pupil is fairly at home in English verse as far as rhythm goes. He can take up a new poem and appreciate its music as far as that depends on rhythm. And this is a great deal gained toward an appreciation of the poem not only on its aesthetic side, but also on its ethical side, since in a true work of art the beautiful form is but the proper embodiment or manifestation of the soul of truth. Body and soul of it indeed are so united that we reach one only through the other and in the other.

But a knowledge of rhythms is not enough to put the pupil into possession of the poem. Metre he has, of course. learned in learning rhythm. He readily distinguishes the number of accents in each verse, and he is beginning to feel the varying adaptability of verses of different lengths. He is coming to see that the line of two, three, or even four accents, does not give the thought room to expand, does not give the poet the needful freedom, and he will begin to see why the longer line has been adopted as the heroic verse, the verse of the drama and heroic narrative. He is by this time familiar also with the simpler forms of stanza as a poetic unit for the expression of thought, and he has observed the function of end rhyme, not only to give pleas ure, but to bind the rhyming lines together and thus to create the stanza. He may easily be led to see that certain disadvantages arise from this peculiarity of rhyme, that rhyme, like the short line, may act as a limitation upon the poet's freedom of expression, and he will be ready to understand when he comes to the drama how the drama in its greatest period gave up rhyming verse for blank verse.

The facts pertaining to rhythm, metre, rhyme, and stan zaic form, should be developed gradually. Comparatively simple and easily recognized, they should be noticed in every poem read, but they need never monopolize the time of the recitation.

Certain other characteristics of verse, of immense importance to the total effect, are more difficult to detect and analyze, and are to be developed still more slowly. Milton, in the preface to Paradise Lost, names three things as essential to true musical delight in poetry: "Apt numbers, fit quantity of syllables, and the sense variously drawn out from one verse into another." It is the first and the third of these three requisites that I now have in mind, aptness of numbers and variety of pauses,—what have sometimes been called tone-coloring and phrasing.

Variety of pauses is essential both to avoid the monotony of an unbroken succession of verses in the type form. and to adapt the movement of the verse to the nature of the thought and emotion expressed. The pupil must learn to see how the emotion at times discards the mid-line pause altogether and hurries us on to the end pause or even carries us pauseless and breathless into the next line; how again the feeling breaks the line into wavering phrases, makes it stagger and halt, or yet again bears it on with the gentle ripple of an untroubled stream. In his handling of pauses Milton himself is easily master among non-dramatic English poets, nor can he be read appreciatively by one who stumbles at his phrasing. And what is preeminently true of Milton is true in their degree of all poets, so that the teacher of literature cannot afford to neglect this matter, though it will take patience on his part to bring his pupils to appreciate it

If this is true of the effect of variety in pauses, it is still more emphatically true of what Milton called "apt numbers." By this is meant the fitness of the sounds in a verse to express the sense, sense including feeling as well as thought. The importance of this can hardly be over estimated. An appreciation of the value of sounds in positive transforms a poem for the reader even the silent trader as the voice of a great artist transforms the music of a great composer. You hardly know it for the same music, and set this is what the composer heard and meant you to

hear, and the poet too meant you to hear all the sounds in his verse as musical sounds wrought into a harmony naturally significant of emotion, and not mere symbols arbitrarily significant of thought. The habitual slovenliness of English speakers in the utterance of vowel sounds, their almost equal laziness in forming consonants is a barrier to their enjoyment of poetry. One of the first things the teacher of literature has to insist on is that his pupils open their mouths properly for vowel sounds and bring the organs of speech into close and proper approximation or contact for the consonants.

This must be done before they can at all feel the musical possibilities of o's and a's and ou's, of t mutes or p mutes, of resonant b's and rippling 1's and r's, of murmuring m's and restless f's. The whispering and the hissing s's will be one to him of the untrained ear and tongue, a line with a monotonous reiteration of one vowel sound will be as grateful as Milton's sonorous organ tones or the varied melody of Wordsworth's Solitary Reaper. The awful lone-liness of the Ancient Mariner which makes the long vowels and the quivering consonants of Coleridge's verse almost an agony, he will not feel, for he will read the verse as mere words with no sense of the expressiveness of the tones

Alone, alone, all, all alone, A one on a wide, wide sea.

The wind in poetry will be but a word to him; he will never hear it, moaning, sweep the plain: Tennyson's brook will never steal by lawns and grassy plots; the music of the land of the lotus-eaters will be no music, the spell of sleep wrought by that fateful land will bring no drowsmess to his eyelids; the shard-borne beetle with his drowsy hums will ring night's yawning peal in vain for him. When Macbeth, on the eve of the murder of Banquo, in the shuddering exaltation of his evil thought pictures the coming on of darkness, the reader of the untrained ear will merely perceive its oncoming as a fact; he will have no sense of the gathering gloom of murder. The exquisite mood of Wordsworth's "It is a beauteous evening, calm and free," and of his "Earth has not anything to show more fair" is

rendered by harmonies of sound quite as much as by word for him who has ears to hear; and so, too, the mingled sympathy, indignation, admiration, and lofty exultation of the sonnet to Toussaint L'Ouverture. Longfellow prepares us for the beauty and the sadness of the story of the Acadian lovers by the voice of the murmuring pines and the hemlocks and the deep-voiced neighboring ocean; he closes with the same tones sounding in our cars, while through the wail of the forest we hear the tides of life ebbing and flowing in the city streets beside the graves of the lovers. Whatever poet we read, whatever poem, the same thing is true. All moods of the heart have their own tones of speech by which they reveal themselves to the attentive and instructed ear. He who reads the words of a poem as mere words significant of ideas has not read the poem. He who would enter into the poet's mood, feel his feeling, and therefore get the very secret of his poem must have his ear trained to the tunes of speech, the music of the spoken word, the harmonies of sound. It is the duty of the teacher of literature to help his pupils to this. It is slow work with many pupils, and with the best the teacher can merely make clear what is to be done and out them in the way of doing it for themselves by constant attention. But so much at least he ought to do

Questions of rhythm, metre, phrasing, and tone-color pertain to all poetry; questions of rhyme and the stanza to most English poetry. Other questions of a different nature remain to be considered, questions of type forms and artistic structure. In discussing these I shall be very brief.

The Greek classification of all poetry as epic, lyric, and dramatic remains good. All poetry made primarily to utter the emotion or the thought of the poet directly, to give the poet direct and personal expression, is lyric. All poetry that centers the reader's attention on an action told by a story-teller comes under the head of epic. All poetry that embodies action, represents it by means of actors instead of a story teller, is dramatic. We say that both epic and dramatic poetry are objective; lyric, subjective. While these

three types are capable of comprehending all poetry, each general type resolves itself into several special types.

It would be too much to ask our pupils to become familiar with all the special types that critics have recognized under each general head. But the general types themselves they should easily distinguish. They should come to feel the difference in the attitudes of the poet in the three instances, and to feel the effect of this difference upon the work and further upon the reader. They should be led to see how the lyric poet's absorption in his own emotion lends fervor and intensity to his work, gives it the tone that we call peculiarly the "lyric cry," and how this tone turns us to the poet himself, how we instruct. ively concern ourselves with the personality of the poet and not merely with his lyric. We should help the pupil to see how the narrative poet's whole-hearted interest in the story he has to tell, in the action for its own sake, makes him sink himself, keep himself in the background, although now and then he may come forward in his own person with a comment or explanation. We should notice the effect that this absorbing interest in the action has upon the poet's method of characterization, and how it turns the reader's attention also to the action primarily and only secondarily to the characters. And again, we should let our pupils see that the dramatic poet is still more than the epic poet absorbed in the action, so completely centering his interest and the reader's upon it that he himself is unseen, unheard, unthought of except when we begin to analvze the structure of his work and consider why he did this and that. We must call attention also to the consequences of the total disappearance of the author from the dramatic work, and show how this makes it necessary for him to reveal character by action, by dialogue, and even by elaborate soliloquies, and further show how the absence of a narrator makes dramatic poetry give greater importance than eme to character as the source of action

Such distinctive characteristics, to name no others, of the lyric, epic, and dramatic types we must ask our pupils to observe, and further we should make them fairly familiar

with the commonest special types in these three departments of poetry. The lyne as the vehicle of the poets own emotion takes on almost as many forms as it expresses emotions, and almost defies classification. Yet the song, whether in the form of the ballad or hymn, religious or national, love song, or mere outburst of lov or grief or passion of any kind, we may recognize, as also the ode and the sonnet. In epic poetry we must distinguish between the great epic and such forms as folk tales, narrative ballads, minor epics, and novels or short stories in verse ludramatic poetry we shall probably be unable to do more than start our pupils upon a study of regular tragedy and comedy as distinct types, though in the nineteenth century drama it will be a great temptation to try to open out to them the dramatic monologue as developed by Browning into a type distinct from narrative, from dialogue, and from soliloguy, yet accomplishing the ends of all these. It will be better to keep the study of special types down to narrow limits, narrower if necessary than I have indicated, to develop rather the general type, and by study of the structure of each poem read to bring our pupils finally to see that every true poem is a work of art and possesses unity of structure

This point which I have put last, that every poem be a work of art and possesses artistic unity, the teacher must put first and keep most constantly in view. I do not mean that he must make it the first thing that he calls on his class to recognize, but it must be first in his own mind, and he must work toward an appreciation of it on the part of his panel. Much that he does under the other heads that I that e contradered he down testistizer thin entil He epipal week Togeth of execution on excharge tenment the reductions of electrical execution entrer and to the idea the ferring the action that a city termines to the whome week and in its uniformy famous for The American Mariner for example we also the tart of time the thereties and thetera existing the age to a continue James thereon as the mothers and about that remarks in a process If the tartery emperiors of to at ma marister of the second which will be with the street of entry their a plant interior to be change in the soul's attitude toward the world, is what gives unity to the poem, is the poem's soul. In Sohrab and Rus tum we notice how a simile that suggests Europe or the modern civilization of the western world breaks the unity of tone, gives us a sense of unreality because it is out of harmony with the Orient and the oriental life in which alone such a story could find proper setting. We analyze the first speech of the king in Hamlet, we seek to hear the very tone in which he speaks, we mark Hamlet's silence, the bitterness in his first words to the king and underlying the courtesy of his replies to his mother, we weigh every word of his soliloquies, because from these things we learn not only the formal relations in which this woman and these men stand each to the other, but the real relations. and discover in them sources of the tragic action toward which everything in the play must tend.

Thus everywhere the detail is studied not for its own sake so much as for the sake of what it contributes to the whole. If this is really in the teacher's mind his pupils will finally come to see it, will themselves begin to look upon details in the same way, and will come at last through a recognition of the artistic structure of the work to take the work to themselves as a whole, to appropriate and make a part of themselves whatever thought or feeling of truth it embodies.

And it is in this way, whether we are dealing with poetry or prose, that we make progress toward the goal that we have always before us in teaching literature. We do indeed in some measure initiate the pupil into life, introduce him into a broader life than that of the individual, and help him to see life in its complex relations, help him—may we not hope?—to see life in its beauty. Surely if we have really succeeded in helping our pupil to read books in this way, to enter thus into the beauty and the truth of life, we shall have quickened his sensibilities to moral and physical beauty and given him new and pure sources of joy; we shall have helped him a little way toward a knowledge of himself, helped him, if ever so little, yet helped him to gain possession of himself, to be a man in the world of men.

LIST OF BOOKS.

The following is a descriptive cutalogue of books on Herbartian pedagogy:

1 DE GARMO'S HERBART AND THE HERBARTIANS (published by Charles Scribner's Sons, New York Piles, \$1 om is the best book in English as an introduction to the Religional bartian movement in Germany and America. The style is simple and interesting, and the biographical, historical, and critical materials are handled in a lively, comprehensive way. This book opens up the whole field of practical and theoretical pedagogy, and will lead any sported teacher to follow up the problems suggested in other lands.

2 OFTEINES OF PEDAGOGICS, by Prof W. Helm, from lated by C. C. and Ida J. Van Lew. This best process in sample out comprehensive form, the standard of the chart school in formary by R. E. 2. Proc. 31 25.

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istration, and the training of teachers. The book may be obtained from C. W. Bardeen, Syracuse, N. Y.

- 3. GENERAL METHOD, by C. A. McMurry. A simple introduction to the leading ideas of Herbart, as The Aim of Education, Relative Values, Interest, Induction. Apper ception, Concentration, and the Will. Public-School Publishing Co., Bloomington, Ill. Price, 75 cents.
- 4. UFER'S INTRODUCTION TO THE PEDAGOGY OF HERBART. Translated by J. C. Zinser, edited by Charles De Garmo. Published by D. C. Heath, Boston. Price, 75 cents This is the best popular introduction to Herbart that has been written in German. Its two leading chapters give a clear notion of Herbart's system as based upon psychology and ethics, while the third chapter on pedagogical application shows how to select and handle the materials of instruction. Herbart based his system of pedagogy consciously upon his psychology and ethics, and both are here briefly but clearly explained.
- 5. Lange's Apperception, translated by the Herbart Club and edited by Charles DeGarmo; published by D. C. Heath & Co., Boston. Price, \$1. The idea suggested by the term apperception has been generally accepted as a contribution to education. Lange's treatment of this subject is more complete and scientific than that of any other writer. The first hundred pages of this book will be found heavy reading for the majority of teachers, as it is chiefly psychological and not always simple and clear. It is not, therefore, the best book with which to begin the study of Herbart. The latter half of the book is more interesting and more directly practical. For one already interested in Herbart's ideas, this book will be found valuable for a deeper and more sustained study.
- 6. THE SCIENCE OF EDUCATION, by Herbart, translated by Henry and Emmie Felkin. D. C. Heath & Co.; price \$1 This is a valuable book for those wishing to get a fuller knowledge of Herbart's life and work. The first fifty-six pages give a brief biography of Herbart and a description of his philosophical and pedagogical writings. These are

followed by a translation of his principal works on education. In German, Herbart's writings on education constitute a classic of rare force and excellence of style. The translators have not given us an English classic, but at least a fair rendering of Herbart's ideas. Herbart's own thought must remain the fountain from which much must be drawn in this educational movement.

7. DE GARMO'S ESSENTIALS OF METHOD, published by D. C. Heath & Co. Boston. Price, 65 cents.

This little book endeavors to reveal the leading principle of classroom method as embodied in what the Germans call the Formal Steps of instruction. The formal steps have found a wide acceptance in Germany as a well founded pedagogical method of handling important topics in any study. It seems probable that the formal steps as a combined inductive deductive method of teaching are to have a great influence upon American methods of teaching. It is an effort to combine all the important principles of instruction into a well organized and logical calso psychological) method of procedure.

by Dr. Herman T. Lukens. D. C. Heath & Co., Boston.

This book is just out of press and is a liberal rendering into English of one of the most popular books of the Herbart tendency in German. The scholarly manner in which this excellent book has been rendered into simple, idiomatic English by Dr. Lukens gives promise of its becoming as popular in this country as in Germany. In his short introduction, Dr. G. Stanley Hall recognizes the value of Dr. Luken's work. In the same connection Dr. Hall gives expression to the following criticism: "Unlike too many members of this group, Dr. Lukens, although thoroughly trained in Herbartian pedagogy and in sympathy with it. does not regard it as the consummate formulation of educational theory nor attempt to apply its rubrics blindly and without change to the very different material and environment of American pedagogy, but has felt it necessary to supplement Herbart both by modern child study and by some practical acquaintance with experimental psychology." If Dr. Hall really believes anything so grotesque as this, that American schoolmasters have come back from Germany with the notion that they have found across the water "the consummate formulation of educational theory and are applying its rubrics blindly and without change to the very different material and environment of American pedagogy," we are sorry for him and are inclined to think that somebody has been playing upon his credulity.

9. Manual of Empirical Psychology, by Lindner, translated by Dr. Charles DeGarmo, published by D. C. Heath & Co., Boston, Mass. Price, \$1.

This is one of the most popular efforts to present the psychology of the Herbart school in a clear and simple form. This is a book for careful study and sustained effort on the part of those disposed to such effort.

10 A Text-Book in Psychology, by J. F. Herbart, translated by Margaret K. Smith, published by D. Appleton & Co., N. Y. Price, \$1.

Herbart has been generally termed the father of modern empirical psychology, and the entire modern movement in experimental and physiological research has a close relation to him as the founder of the tendency. This is Herbart's chief work on psychology. The article in the Encyclopedia Britannica on Herbart is important as a review and critique of Herbart's psychology.

It is not our intention to give a full list of all books and articles in English bearing on Herbart's doctrine. Such a list will be found in DeGarmo's Herbart and the Herbartians, at the close, and in Outlines of Pedagogics by Rein and Van Liew.

In spite of the number of books on Herbartian pedagogy published in this country since 1890, a good deal is yet to be done before teachers will readily feel the stimulus and power which naturally spring from the study of Herbart's doctrines.

Translations from German into English are apt to be a little heavy and dull to American readers. The literature of Herbart in this country will be greatly enriched when American teachers, after practicing with these doctrines in their own schools, write from the standpoint of a full experience with the rich materials of our own course of study. We have only begun in this country to apply Herbart's ideas to the specific problems of our different school studies as well as to the general plan and organization of the school course.

The foregoing list of books in English has been arranged in the order in which they may be successively taken up by a club for reading and study. It is hardly necessary, however, that all these books should be studied.

For a shorter course for clubs we suggest the following as numbered above:

- 1. DeGarmo's Herbart and the Herbartians.
- 4. Ufer's Introduction to the Pedagogy of Herbart.
- 5. Lange's Apperception.

When clubs are formed and a number of books needed, it is probable that all the publishers will give a reduction in price. The chairman of each club will do well to write to the publishers for price-list and special terms to clubs before ordering books. In the Second Supplement to the First Year-Book is a statement of special terms offered by publishers.

A few of the leading German works of this school will be noted, as follows:

The best edition of Herbart's own works on education is Herbart's Pædagogische Schriften. Ed. by Wilmann; 2 vol. Leipzig.

Stoy's Encyclopædie der Pædagogik. Leipzig.

Ziller's Einleitung in die Allgemeine Pædagogik. Leipzig.

Waitz's Allgemeine Pædagogik. Brunswick

Dorpfeld, Denken und Gedaechtniss. Guetersloh.

Lange, Ueber Apperception. Plauen.

Wilmann, Pædagogische Vortræge. Leipzig.

Ziller, Grundlegung zur Lehre vom erziehenden Unterricht. Leipzig.

Ackermann, Ueber Concentration. Dresden.

Th. Wiget, Die formalen Stufen. Chur.

Rein, Pickel, Scheller, Theorie und Praxis des Volk schulunterrichts. 8 volumes. Leipzig.

Beyer, Die Naturwissenschaften in der Erziehung's schule. Leipzig,

Ziller, Regierung der Kinder. Leipzig.

PLAN AND PURPOSE OF THE NATIONAL HER-BART SOCIETY.

LOCAL CLUBS AND THEIR WORK.

The National Herbart Society for the scientific study of education was organized in Denver at the meeting of the N.E.A. Its purpose is to study and investigate and discuss important problems in education. Its members do not subscribe strictly to the doctrine of any one leader, but seek for fair and thorough discussion. Some members of this society are strongly functured with the educational doctrines of Herbart, others are not, and it is right to expect an honest search for truth.

An executive council of nine members has the control of the society's work. They are as follows:

Charles DeGarmo, Swarthmore College, president; Nicholas Murray Butler, Columbia College; John Dewey, University of Chicago; Wilbur S. Jackman, Cook County Normal School; Elmer E. Brown, University of California; Frank McMurry, University of Buffalo; Levi Seeley, State Normal School, Trenton, N. J.; C. C. VanLiew, Illinois State Normal University; Charles A. McMurry, Normal Illinois, sectary. (After Sept. 1, 1896, the address of the secretary will be Chicago University.)

The society was organized for the aggressive discussion and spread of educational doctrines, and it desires to draw into its membership all teachers, students of education, and parents who wish to keep abreast of the best thought and discussion. It publishes a Year-Book four weeks before the N.E A. meeting, which contains two or more complete monographs on important topics carefully worked out by specialists in educational fields. The Year-Book is sent to all regular members. In addition to the Year-Book the society, through its secretary, will send to each member one or more additional pamphlets during the year.

The First Year-Book was published before the Denver meeting and sent to members as a preparation for the discussion of its contents at the Denver meeting. The first Year-Book contained four articles, as follows:

Most Pressing Problems Concerning the Elementary Course of Study, by Pres. Charles DeGarmo.

Concentration, by Dr. Frank McMurry.

The Educational Theory of the Culture Epochs, by Dr. C. C. Van Liew.

A Plan of Concentration for First Two School Years, by Mrs. Lida B. McMurry.

These papers were quite fully discussed at the sessions of the National Herbart Society at Denver.

For the sake of those teachers and local clubs desiring to pursue a regular course of reading introductory to the doctrines and practice of Herbart, a series of books and readings is above recommended.

The First Supplement was issued in November, 1895. A Second Supplement, containing Dr. Dewey's discussion of "Interest as Related to Will," was discussed at Jackson-ville and sent to members in March, 1896.

Regular yearly membership in the National Herbart Society may be secured by the payment of one dollar. This entitles each member, without further cost, to receive the Year Book and each supplement at the time of its issue. Persons not members may receive copies on the following terms:

Year-Book, 50 cents. Each supplement, 50 cents.

A reduction of twenty-five per cent will be made for orders by members of half a dozen or more copies.

Back numbers can be ordered from the secretary.

LOCAL CLUBS.

A plan has been formed for the organization of local clubs of those wishing to study the Year-Book, and other literature furnished by the National Society. When four or more members wish to form a local club, the membership is fixed at 75 cents for each person. They will elect a chairman, who will conduct the correspondence, receiving the Year Book and supplements for the club, sending the money, and forwarding all questions and other communications to the secretary of the National Society. The local clubs may also wish to take up the additional course of reading outlined in this supplement. Each member of a local club is entitled to a copy of the Year-Book and a copy of each of the supplements.

For the organization and conduct of a local club the following suggestions are offered:

- 1. Gather together four or more persons who are willing to spend time regularly in reading and discussing the literature of education.
- 2. Appoint a chairman of the local Herbart Club, who will promptly and energetically carry out the plans of the members, arrange for regular meetings, send in subscriptions, order books and supplements, etc.
- 3. Let the club appoint a meeting once a week, or once in two weeks, for an hour's review and discussion of the literature furnished or suggested by the National Society.
- 4. Plan for ten or twelve weeks in advance a series of readings of definite articles in the Year-Book, or of other books or monographs. Let each meeting hold to a close discussion of some chapter or portion of a monograph previously read and studied.
- 5. At each meeting, one of the members of the club should present a well prepared paper discussing, reviewing, or criticising the subject in hand.
- 6. Each member should make written notes on his readings which may be offered as criticisms, questions, or remarks on the subject, following the introductory paper.

- 7. Dr. De Garmo,s "Herbart and the Herbartians" is suggested as a suitable book with which to begin the study of Herbartian principles. (Published by Charles Scribner's Sons, New York; price, \$1.00.) Later, the monographs of the Year-Book may be taken up as more detailed and illustrative discussion of important doctrines or theories.
- A. In the discussion of important topics, such as apperception, interest, concentration, culture epochs, etc., plan a series of comparative readings from several books and authors.

The purpose of the National Society is to give to the doctrines of Herbart, as of other educators, a thorough study and criticism. Attention will therefore be called in the supplements to criticisms and discussions of these doctrines from whatever source.

It is further the purpose to test all theories by the standard of practical usefulness, and in the midst of all theoretical studies to keep an eye upon practical applications.

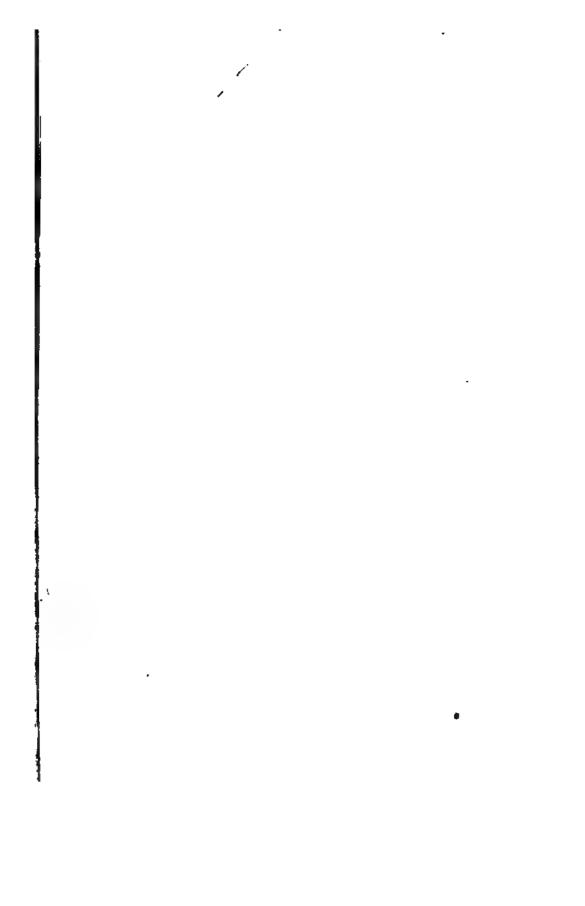
Those wishing to become members of the National Society, either singly or in clubs, should send the membership fee to the secretary.

All communications should be sent to

CHARLES A. MCMURRY, NORMAL, ILL.,

Secretary of the National Herbart Society.

(After September 1, 1896, address the secretary at Chicago University.)



FIRST SUPPLEMENT

OF THE

Second Year-Book for 1896

OF THE

NATIONAL HERBART SOCIETY

TRAINING FOR CITIZENSHIP

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 This supplement is sent to all members (for this year) of the National Herbart Society.

2. All members who can attend the session at Indianapolis, should

read this paper carefully before attending the meeting.

3. The discussions of this paper and other articles on the same subject will be published in the forth-coming Second Supplement of the Second Year-Book.

4. At the close of this pamphlet will be found a statement of the organization of the National Herbart Society, and the plan for establishing local clubs.

5. The publications of this society are designed for careful study. Many local clubs are already established for the regular study

and discussion of these papers.

6. Persons desiring the First and Second Year-Book with the supplements should send in their names and subscriptions (\$) per year), to Charles A. McMurry, Chicago University, Chicago, Illinois.

7. All old members who have not remitted for this year, are in-

vited to renew their membership.

8. The Third Year-Book, which will be sent to all members about June 1, 1897, will contain articles on Moral Training in the Public Schools by Dr. John Dewey, Chicago University; Prof. John Adams, Free Church Training College, Aberdeen Scotland. Dr. W. T. Harris, Washington, D. C., Dr. Charles DeGarmo, Swarthmore, Pa.

TRAINING FOR CITIZENSHIP.

BY JEREMIAH W. JENKS, PH.D. PORNELL UNIVERSITY.

OUTLINE.

1. "Campaigns of education," while useful, are educative to only a slight degree. The time is short; teachers poor, voters do not feel the need of education.

2. As a preliminary to outlining methods of training for citizenship, the nature of some of the important social evils is considered, and mental and moral inertia discussed.

3. The adaptability needed to lessen many of these evils requires on the part of citizens technical skill, knowledge of social institutions, mental and moral independence, tolerance, impartiality, feeling of responsibility,

4. In the schools should be given the right ideals of the state and citizen, and the above mentioned knowledge and personal qualities—Brief consideration of methods of teaching.

5. Is such work too advanced for the schools? Apperceptive material.

6. Practice for children in duties of citizenship.

7. Place in the school-curriculum of the training for citizenship.

8. Training outside the schools.

9. Summary.

TRAINING FOR CITIZENSHIP.

The veteran pedagogue is inclined to smile,-rather pathetically to be sure, when he thinks of the need for better citizens,—at the expression, "campaign of education," which has become so popular nowadays. The efforts of some 14,000,000 voters to "cram" on the money question, for example, in the short space of three or four months with the aid of "coaches," each of whom is bent on giving a warped view of the subject, are praiseworthy and worth far more than the millions of dollars spent in the process; but it is a misnomer to call the process education. The more thoughtful voters will get much trustworthy and valuable information as a result of the special interest of the time; the rousing of the attention of so many to the importance of public questions, and the stimulation to think of the citizen's duties are of inestimable value in kind, though wofully inadequate in degree. But back of the whole process is the tacit assumption, that what our citizens chiefly need is specific information on the issue of the day, while such information is in fact of minor importance.

The whole matter of the education of adult voters is made doubly difficult, because, in the first place, teachers who are both willing and fit are hard to find,—the willingness, judging from our campaign speakers, usually existing in inverse ratio to the fitness, - and in the second place, the voters rarely feel sufficiently the need of training. That most difficult and complex of trades, statecraft, most voters, except the true statesmen, think they know by intuition. With lack of knowledge, too, on the subject, is often united the blindest prejudice and even pride in this prejudice, Men, otherwise sensible, see only wisdom and patriotism in their own party, in their opponents only folly and corrup-

tion, only good in the institutions of their own country, only evil in those of a foreign nation, though such short sightedness checks progress.

The purpose of training our citizens, whether by campaign speeches or in schools, is to secure better service for the state, greater willingness and intelligence in curing social evils, greater zeal in promoting social good.

But before one can speak intelligently of the kind of training that our citizens need, one must consider somewhat carefully the nature of social evils and of social reforms. Such reforms must all be effected either (1) by improving the opinions and habits and characters of the individual members of society, or (2) by changing for the better the relations existing between different persons and classes and institutions in society.

Hitherto, most efforts of social reformers have been directed toward the reform of the individual by improving his moral character or habits, and only here and there, in an unsystematic way, have efforts been directed toward improving his relations with others. Yet possibly the greater number of our social evils come from mal-adjustments in social relations. This undue emphasis that has been often laid upon the faults of individuals may be my excuse for emphasizing, first, the social evils that arise from social misfits. I do not ignore the others by any means.

There is, of course, a constant tendency for social institutions of all kinds to adjust themselves to social needs. The environment will in the long run modify the individual, unless the individual has power to change the environment; but, always, as society moves on into new habits, old institutions will be found unfit for use and much suffering must be endured in making the needed transition from old to new. When, for example, late in the last century and early in this the spinning jenny and the power loom were coming into general use in England, the hand looms in the cottages lost their value; the hands of the cottage weavers were forced to rest in idleness; the despair of the hungry whom the spirit of progress was starving to death led in many instances to riot; but their despair and passion availed noth-

ing. The abler were forced to adopt the new methods; the feebler, the more ignorant, died; but industrial society moved on through this suffering and evil into a better condition than it had ever before enjoyed. It was not the characters of the individual rioters and murderers that especially needed reforming; the need was rather for some device to adjust quickly the economic machine thrown by the new inventions for the time being out of gear.

We must realize that like evils are always with us; must always be with us if economic society is to improve, unless we can devise a way of rapid adjustment to changing circumstances. The last twenty years has seen a revolution no less complete than that of the weaving industry. The rise of our great combinations in industry: the Standard Oil Trust, the Sugar Combine, the Telegraph Monopoly, and the hundreds of sister savers of expense have brought their evils. We no longer, it is true, except in rare cases through ignorance of the suffering, permit our fellow men to starve; but many a manufacturer or dealer in these monopolized products has had his competitive business forced out of his hands; thousands of the non-employed, thrown out of work by the monopolies, have been driven into pauperism. Monopolies prevent bankruptcy of the monopolists, but multiply bankruptcies of their competitors.

Legal institutions suffer from like evils, and bring like evils upon society. Within twenty years a whole body of law dealing with inter-state commerce has been created. Under the old law cities were built up or ruined to suit the needs of railroad directors. Sometimes they bought up a tract of land, located towns on it, gave it special rates to help it, and reaped the harvest they had sown. A business man here was lifted into affluence, his rival swept from the industrial field by the favor of a good natured, or corrupt freight agent,—and all because our commercial laws were behind the times. Many a college or charitable institution finds itself hampered by the terms of an old-time legacy, framed to suit the needs of a bygone day; many a city groans under the baleful influence of the Dartmouth College case, which recognized an outworn contract as good as

new. Our courts still permit at times street railways, or other corporations, under old contracts, to plunder cities, while brand new laws, also, and new decisions made to remedy old evils, like new machinery, bring their hardships.

Again, the slow action of courts—made slow by technical rules, fitted in most cases to do exact justice—are not suited to the needs of many new communities in cases of extreme hardship. So vigilance committees and Judge Lynch swing to the nearest tree the horse-thief or riddle with bullets the colored violator of woman's honor. Such means seem in these exceptional cases at times the only remedies.

So it is, also, in political institutions the world over. Our former methods of voting were well enough adapted to local government in most rural communities where they were first employed. They were not then abused, but before they were changed they had resulted in so vast a system of corruption that money given by reputable citizens in New York bought village votes in Indiana and Connecticut by the thousands, and in many cases had so completely demoralized the voters that the traffic in votes was looked upon by many of the more ignorant and thoughtless as a proper means of income. "Is not my vote mine? May I not dispose of it as I please?" Even many thoughtful people do not realize that the ballot is a public trust.

Most of us believe, I suppose, in popular suffrage; but we cannot blink the fact that the ballot in the hands of the negro in reconstruction days drove into bankruptcy several of our southern states; furnished a travesty on legislatures and legislators perhaps never elsewhere equalled in a civilized country, and finally drove the whites into the armed revolution of the Ku Klux; an act perhaps not so discreditable to their manhood and sense of justice as would have been peaceful submission to the forms of law forced upon them. When the representatives of the people supply themselves with costly viands and elegantly furnished rooms for themselves and disreputable friends at the public expense, free men will revolt.

Few in that contest on either side could be much blamed. Social evils often do not impute conscious guilt to individuals; otherwise the injunction to love one's neighbor would be more difficult to heed. Doubtless in reconstruction days Congress acted with good intentions, though probably with some natural and pardonable partisan feeling, and surely no one can blame the negroes for their failure or for their personal unfitness to fulfill their task. There was a misfit—that was all. Institutions and people were not in harmony. Corruption, then anarchy, then an aristocracy—better said an oligarchy were the natural outcome of the conditions. On one side the whites had outgrown their old institution of slavery; on the other, the new institution of free government was fit for a more advanced people than the negroes, or for a more homogeneous people than those trying to live together in peace. To both sides serious evil was the result.

In our legislatures, examples of the same kind are numerous. Most of the members in private life are honest, well-meaning men, who would like to give our state excellent government. Unfortunately, the circumstances of their elections, the nature of the tasks that they find themselves called upon to do, the closeness with which they are held to the work desired by the party chiefs, the pressure upon them to get through local bills to please their constituents, prevent them from doing much that is of general interest, and soon lead them to consider an independent member with earnest opinions on measures of general interest as unpractical and visionary.

At election times, a wealthy corporation makes a large contribution to a campaign fund. After election the party leaders feel under obligations. If a bill comes up that affects the interest of that corporation, a hint to the campaign chief, the boss, will bring word to every legislator, if need be, who has been nominated and elected under the influence of the party organization. He is told that the interests of the party demand his vote. He may feel that the bill is on the face of it detrimental to the state. He may not see how it is for the interest of his party; but his chief says that it is of vital interest. He believes in his party; be is under obligations to the chief; in nine cases out

of ten he will yield. Most of us would. Again, some worthy institution in his district, say a state school for the feeble minded, needs state aid, and ought to have it. He introduces his bill. Other members know little about it, but other members have also bills calling for appropriations, many of them not worthy, but popular in their districts. They ask him for his vote, plead the personal necessity to themselves of passing their bills. He needs their vote for his bill. He votes for theirs, careful perhaps not to inquire too closely into their merits lest his conscience should prick him too hard. Thus, too many bad measures pass. We blame our representatives; but many of us would do no better. The truth is that our political machine needs rebuilding in many parts.

Even in religious institutions changes come that bring often untold suffering. I need only refer to the persecutions of the Middle Ages and the Reformation. Even today men burn, though not at the stake, because they think in advance of their time. Many a person joining a church in his younger days finds that, as his sympathies broaden, as his range of spiritual vision extends, he no longer places the same emphasis on certain dogmas as before. His fellow church members may consider him unfaithful to his duty; he may even be made to feel that he has wounded grievously the hearts of those most dear to him but he cannot go back. He may, in his suffering, impatiently blame his critics for their narrowness; but this is equally . unjust. They can not come with him No one is to blame The religious institution is not adjusted to his needs. When he reaches the height from which he can overlook the whole field, he will see that, as there must be different political or social groups to suit the various political or social beliefs, so must there be various religious groups to fit the changing religious needs. The period of transition from one group to another -if one can not be tolerant enough to feel at home in either--is a time of suffering. The time of a general shifting in belief, as in the 16th century, is a time of revolution. Can this in any way be avoided?

Conditions are not materially different in what we call society in the narrower sense of that word. Most of us are born into a certain place in the social life of our town or city. So long as we stay there and are like our companions, we are comfortable; but if, through added wealth, or higher intellectual training, or changed political positions, we attempt to change our place, discomfort ensues. Still greater discomfort comes, perhaps, if through misfortune or disgrace or poverty or love for evil, we take what is considered a downward step in the social scale. Whenever we are unsuited to our social surroundings, we suffer.

But social and personal discomforts, evils, may also arise, and often do arise, likewise from what may be called personal disharmonies. We sometimes meet persons, who from birth, training, social experiences, manner, etc., would seen to be suited to us and whom we wish to know well, but with whom we are always at odds. Even dear friends of our childhood days, sometimes as years go by, grow away from us or we from them, as changes creep into our lives.

All these evils, personal and institutional, when we look closely for their causes, throw much light on the nature of society, and point out the necessary nature of social re-Aside from lack of conscience in the individual, the evils are all alike in essence; all demand individual or institutional adaptation. Whether the evil be economic, as in the case of the hand weavers, when power looms were bought; or political, or legal, or religious in all cases there has been on one side a human mind or spirit out of harmony with its surroundings. Either the individual has changed, or his surroundings have changed, and the man, under the domination of mental and spiritual inertia, is unable to will a change in himself to meet the new conditions, or if he makes the change, he suffers, because others do not change with him. As one looks into the faces of men suf fering from lack of work, and finds each of them looking for the special work that he has been trained to do, and unwilling or unable to turn his hand to other things, one begins to realize the social significance of what may well be called psychical or mental inertia. Still more pitiable, if

possible, does this mental inertia appear when one sees men year after year—generation after generation sometimes—clinging to the cherished name of a political party, and worshiping it for what it has done, as if, when the issues of the day had changed and even the personnel of the membership, the party remained the same. Most men are too weak, too careless, or too lazy mentally to readjust their political beliefs to the changing needs of the day.

Even in spiritual or religious or educational matters, conditions are much the same. The great mass of people rest in the places into which in early days their parents, the circumstances of their lives, their early training have placed them, or they follow blindly the leader whom they have chosen. If great preachers and teachers could use their influence over their followers' opinions for personal gain, we should soon have religious and educational "bosses," as we have political bosses. How many teachers gulp educational doctrine; how few make good doctrine, or even assimilate it and use it wisely and independently! One feels tempted to conclude that the most powerful social influence is mental inertia, spiritual laziness. It tends toward stability; but it is the stability of stagnation, of death. Social Reform demands a force that will quicken the minds of men; will render them more adaptable to their surroundings, more ready to fit themselves to the needs of the day.

But, let us note for a moment, too, besides the mental inertia of the multitude the mental force of the inventor or the thinker, an activity that often causes suffering, though it is an inevitable preliminary to social improvement. Mental slowness, as we have seen, may cause the starvation of men and families who cannot readily learn to tend a power loom; but the inventor of the machine, also, till his machine is established in popular favor, may well have made himself miserable, because he realized the imperfections of the old loom on which he was compelled to waste his time. Nay, he may even starve before he can convince his fellows of the value of his invention. His mental keenness may bring him discomfort at first, and will cause his

fellows suffering later, though ultimately it will bless the world. Not only did Galileo and Luther suffer for their advanced ideas, but they caused suffering to thousands of others by setting the pace of life faster than commen men could follow, and yet by their originality they became two of the world's greatest benefactors.

It is a painful reflection that, while we can advance only by the aid of advanced thinkers, yet they and we must suffer in our efforts to harmonize our views. Popular government, of course, demands these changes; and we can never avoid, we can only minimize the disharmony. A large part of the work of the conscientious legislator is the adaptation of good bills to suit the whims of stupid people.

The remedy for these evils lies in two directions: (1) The leader himself may have so clear a vision of the future of his work and of its ultimate success that he overlooks the present suffering to himself for the sake of the future benefit of the world; (2) he may see into the nature of society and its tendencies so clearly that he may bring about more readily than is common a readjustment of the institution itself.

If now the evils in our society are to be removed, in good part, only by increasing the power of our workers in the industrial field to adapt themselves readily to their conditions, no matter what new circumstances may arise; or, in the political, or legal, or religious field, either to adapt themselves to circumstances, or to modify conditions by changing institutions, political, legal, social, one can see how completely social reforms rest upon education of the citizen. If our schools and colleges cannot now give the kinds of education needed, we certainly must have widespread educational reform within and outside of the schools.

For the hand-worker, perhaps the best training that can be given to secure adaptability in his industrial activity is that of a good manual training school. But the question of educational reforms even for the industrial life involves far more than manual training, good as that may be in plan and practice. Not merely skill in turning one's hand to any kind of mechanical work is needed; but of vastly more con-

sequence is the spirit of adaptability, readiness to do as best one can whatever offers,—the spirit of independence and self-respect that implies a willingness to stand, by one's self, if need be, for one's own opinions, and to do one's duty under all circumstances. Laboring men often refuse to adapt themselves to new conditions from fear of the opinion of their trade-unions, or from foolish pride which hinders them from stooping to tasks requiring less skill than does their own. They may be justified at times. I do not overlook their argument that one may become permanently classified with the less skilled laborers. Politicians hesitate to act freely for fear that they may alienate their party votes, or-worse yet-the party boss. Voters do not vote against the party for fear of being called irregular, Preachers hesitate to speak the whole truth for fear of their congregations. Congregations hesitate to think freely from fear of the preacher and elders. But there must be this personal fearlessness and independence, if men are to adapt themselves to social institutions or to adapt social institutions to their needs. They must see clearly, decide independently and impartially or society must suffer. This involves, as I understand it, in many cases, the setting up of new and higher ideals of life, and habituating our citizens to strive for these ideals instead of for their present ones.

Again, as men need to have personal adaptability and independence, they must also have tolerance for independence in others, if social evils are to be overcome. If I ask that in religious matters I be allowed to think freely and to live in peace without a creed, I shall only bring lack of harmony into society, unless I am equally ready to let my Christian brother who wishes to do so, keep his creed without calling him narrow or despising him. If in politics I demand the right to stand as a democrat or republican or mugwamp, I may do so with advantage to our political institutions if I let my neighbor take another position with no feeling that he is not doing what is right. Until I am thus tolerant, I am rendering political changes difficult, and am forcing disharmony into society in a way that will have evil consequences. The free use of the epithets, "an-

archist, revolutionist," on the one hand, and "robber, con spirator," on the other, in the last campaign, did not tend toward either harmony or remolding of institutions. It was irrational and of evil influence.

Still further, if I am to work out reforms of our social evils, I must have a thorough knowledge of our social institutions, so that I may not merely fit myself to them so far as I can, and let my fellow citizen shape his course without hindrance; but, also, so that I may shape the institutions themselves to meet the needs of the times. When, for example, public opinion is changing (let us say on the temperance question), a conflict is sure to arise between the present laws and the new habits. The student of social institutions should be quick to see the coming change, to know the new form of law that will be in harmony with the new opinion, and to make his influence felt in bringing about the passage of the law. Legislators usually seek to follow public opinion, and practically they must not go too far in advance of it; but we shall not only hasten progress, but also more nearly secure social harmony, if our laws somewhat precede and thus help to mould public opinion into definite form. The legislator ought to lead as well as to follow.

Political corruption in many of our states had reached so low a depth that outraged public sentiment demanded its cessation; but the temptation was still so great for political leaders and corrupt voters that unless the election laws were changed the evil would continue and society suffer. Men with a knowledge of comparative legislation were soon able to see the remedy, and the present ballot laws in most of our states—which greatly lessen the evil—have been the result; but they will be continually improved, and will become more and more successful for the next decade as the public learns to know them better and to appreciate better their value.

Always needed reforms will come in time. But much suffering, much time can be saved by a knowledge of the needed changes obtained through a careful study of social institutions. For this special knowledge we must rely

largely on our educational institutions. Few of them can now furnish it.

But besides and above these special bits of political and social knowledge, there needs to be an ideal of the value and purpose of the state. That should be taught specifically to all our voters, in all our schools; and while the schools should teach far more than they now do politics, government, patriotism, the nature of society, these subjects should be taught as living realities, not as dead forms

Much time is now given to the subject in many of our schools, but little that is of much value is generally taught. Of course one will find exceptions. Usually the skeleton of our constitutional law is given. Our young people learn the names of the offices, the length of the terms of officers, the kinds of duties performed; but they do not learn the motive forces in our politics, how the work of politics is really done, nor what the purpose in government is and ought to be. To follow the biological analogy, let us have taught the physiology rather than the morphology of government. Sometimes the effort is made to teach patriotism by singing patriotic hymns, by displaying on the school house on anniversary days our nation's flag, by reciting the victorious deeds of our fathers, by conveying to the children the thought that this country has wider stretches of territory, more fertile fields, more millions of population, a better government than have other countries. Some of these things are good, some of them are true, but few of them will tend strongly to cure our political ills. We have enough pride in country Devotion to our country's good, true patriotism, demands that we see our country's weaknesses also with impartial eye. We may, we will, still love our country best, if we do not think that the English or German or French people should envy us for our advantages. They will not do so even if we think they should. They, too, have been blinded by foolish teaching, and they, too, see only their superior excellencies, for each nation has some points of superiority. True patriotism demands sacritice, if need be, and its spirit is not that of a braggart. What is the true purpose of a country that should be taught

in the schools, and that once breathed into the hearts of our citizens would remove the factional troubles that threaten our country, by making men of different parties none the less earnest, but more tolerant, and more unselfish? What is the citizen's ideal? How shall we measure the value of a country? No modern writer has expressed it better or with more apt illustration than James Russell Lowell in his classic essay on Democracy:

"The true value of a country must be weighed in scales more delicate than the balance of trade. The garners of Sicily are empty now, but the bees from all climes still fetch honey from the tiny garden plot of Theocritus. On a map of the world you may cover Judea with your thumb and Athens with a finger-tip and neither of them figures in the prices current; but they still lord it in the thought and action of every civilized man. Did not Dante cover with his hood all that was Europe six hundred years ago, and, if we go back one hundred years, where was Germany, outside of Weimar? Material success is good, but only as the necessary preliminary to better things. The true measure of a nation's success is the amount that it has contributed to the knowledge, the moral energy, the intellectual happiness, the spiritual hope and consolation of mankind. There is no other, let our candidates flatter us as they

If we can have an educational reform that will lift the political ideal of our young people to this height, we shall find them easily adaptable to any change in mere form that our institutions may demand. This is of chief consequence. The methods to teach this can be found applicable in history or literature—wherever the thought of the higher purpose of the state appears.

The methods of fixing such ideals regarding man and the state are not formal. No teacher who is not himself aglow with enthusiasm for refinement, beauty, sincerity, truth, righteousness, can kindle in those under his charge this flame of the higher patriotism. Formal statements of ethical principles count for little toward righteousness when coming from the lips of a hypocrite. A cheer for

"Old Glory" from a teacher willing to buy his place by political service, or party favoritism, will not go far toward civic culture. All teaching of the highest type is personal, is the benign influence of a stronger, or purer, or riper nature, over one less mature. The occasions for the exercise of this influence in fixing a child's standard of honor, may readily be found. In fairy tales may it not easily be seen that the author's and the teacher's sympathy and admiration are for the worthy? In history a fair analysis of the characters of the great will show that in the long run when the touchstone of the historic judgment is applied. only worthy qualities ring true. In these days of the Napoleonic revival, we may still admire the wonderful intellectual power, the superb self control in moments of supreme importance, the matchless capacity for achievement along almost all lines of activity that made the first Napoleon, considered the "Man of Destiny;" but no less inevitable is the judgment of contempt for his vanity, treachery, lying. Even a little child of right impulses reading his life with a discriminating teacher would pity and despise his weaknesses. The same child would as readily see that the chief cause of Washington's greatness was a moral one, which gave him the confidence of his people. The greatness of Socrates, Alexander, Newton, Darwin was based on service to humanity.

The normal instincts of children—of adults too for that matter—are right. The true success of character as compared with the empty gain of pelf is not lost sight of in literature or the drama. In a down-town theater with an audience of roughs and criminals, the applause is always hearty and genuine for noble sentiments, and the villain earns his meed of hisses. When we read King Lear, no one doubts that it is the dead Cordeha, faithful, honest, though misunderstood, who has really succeeded, and not her scheming, prosperous sisters. Only in matters of real life when self is concerned does our selfishness lead us into false judgments and our ambitions aid us to condone evil in others. Children may be led to set up false standards; and there is among us a too frequent custom into which they

easily fall of confounding smartness with ability and the attainment of money or office with true success. The habit of the teacher, and the making of frank judgments on the right side in literature and history, will aid greatly in making sound judgments in life—especially if the skillful teacher without too obvious effort takes occasion to raise problems for the child to settle which will serve as precedents when real tests come later in life.

Aside from personal questions, the ideals for the state may in the same way be touched. Lowell has given in a pregnant sentence the cause of the greatness of Athens and Judea; but in our common school work the material is abundant for like judgments. What were the elements of strength in the various colonies? What led to success? What to misfortune? What was the influence of the slave trade and of slavery upon the south? Why was it good policy to pay off the Revolutionary debt? What have been the influences of the schools as compared with the saloons upon our civilization? The working out of the answers to questions like these will fix the right ideals.

In higher schools, in colleges and universities, more specific methods of political reform, comparative legislation that teaches how to fit the experiences of other times and countries to our own needs, can be well taught, if the teacher is ready and willing to look into the real evils in our government, to point them out with impartial hand, to hold up the higher ideal, and to call on his classes to find the remedies. It is essential, especially with older pupils, to see the facts of our political life as they are—evil as well as good. So economic truth, facts regarding treatment of criminals, of paupers, all principles of social development, can be taught. In the public schools even might incidentally be taught many specific facts regarding our legal rights and duties, elementary principles regarding contracts, torts, election laws, business forms, etc.

To a great extent, too, all these subjects can be taught in a practical way, i. e., so that pupils may get interest enough in the ideal to begin to form the habit of action which looks toward its realization. Of far more consequence in the training of citizens, however, because of more general application, and because character and habits that run through all our work are of more consequence than mere knowledge, or even practice in philanthropy, or in business or social life, or even than the highest ideal of the state, is the cultivation in our schools of the spirit of impartiality, which gives sound judgment, and a feeling of personal responsibility.

This strikes at the root of all educational method, for from it comes a habit of work that will greatly aid in the mastery of any subject. While these characteristics are often personal gifts, they can still to a great extent be cultivated-both in school and life. The common attitude for most of us to take on any question is that of the advocate. We are right Those on the other side are wrong. We often go so far as to condemn unheard people who are as sincere as we are. This mental attitude engenders strife, prevents compromise, stifles truth in the embryo. The true attitude of a man and citizen is that of a judge, who expects in cases of dispute to find some truth on both sides; who is willing to see the good and the evil alike, so far as they exist; who is prepared to find both parties sincere, but with different points of view. The mere effort to take this mental attitude, the mere saving to one's self that the person on the other side is, in the minds of others, as likely to be right as are we, will be enough to render our opinion worth more than usual.

In our higher schools and colleges, there is often a tending toward extremes, toward favoring the position of the advocate that for the students is injurious ever after in social life. In one of our great Western universities debating societies are popular, and a prize debate the great intellectual exhibition of the year. An instructor in political economy has told me that it is exceedingly difficult to get the students in that university to consider impartially any controverted question which may come up for consideration in the class-room. All are ready to advocate one side and close their minds to reason on the other. This would seem trivial were it not that our politics, our schools, our re-

ligion, our social life throughout is permeated with this intolerant spirit. We are all proud to be partisans in politics or religion; we ought to weep over it; for it is chiefly this intolerance that keeps us from adjusting ourselves readily to the changing conditions of social life, as well as from easily changing our institutions to suit the needs of our people. This spirit of fairness to both sides can be cultivated in our schools and colleges.

In all true teaching of science in which the pupil is led to observe independently and to draw his own conclusions, we find some of the best methods for inducing this habit of mind. But, possibly, because in our lives as citizens, most of our judgments must be moral judgments, based on premises as variable in kind as is human nature and social customs, we shall probably find more aid in History and Literature. We must teach impartiality by giving practice in forming judgments. Most children in the public schools are taught to look upon England as a tyrannous country. Would it not be better to ask the children to find out why England felt justified in trying to subdue her rebellious colonies; and to let them see that the question was not entirely one-sided? Again, why was slavery so much more prevalent in the South than in the North? Were the Southerners all bad? Was Washington (keeper of slaves) a worse man than Wendell Phillips, the abolitionist? England has taught us much that is helpful and useful, regarding the civil service and ballot laws. Can our pupils find out other things in which she and other countries are to be considered more advanced than is the United States? We need not fear to weaken the sentiment of patriotism. The true patriot is eager to improve his country; only the demagogue tries to datter his followers into senseless content. Our history is so full of glorious success that our citizens need no special ucentive to pride of country. They need, rather, a keener sense of responsibility.

It has been urged at times that work which deals with politics and the nature of the state is too advanced for the public schools, at any rate for the lower grades; that our children have not the proper apperceptive material; cannot connect such work with anything that they have previously learned. Such an opinion, however, comes from a mistaken conception of the nature of the state and of government, and of the purposes for which they exist.

We are all too accustomed to think of the state as something remote from us. If we speak of state aid for education or state ownership of railways, our minds turn at once to the capital city of our state, or to Washington, the seats of active government. We need not merely to know, but to feel, to make real and habitual to our thinking the fact that we, as individuals, are part of the state; that it can not exist without us, and that no one of us, strong or weak, young or old, voter or non-voter, fails to exert influence on the government or can put off responsibility for what is done by the state. Our influence may be weakened by a boss; we may try to avoid responsibility by remaining away from the polls; but, not only our congressmen and legislators, but every voter who aids in an election; every woman who strengthens a husband's or father's arm, not merely in voting, but even in business, or social life; even the new-born babe, whose needs stimulate its father to more activity in labor, love for which makes its mother kinder, more charitable, more considerate of others, are powers in the state; and everyone who has reached years of discretion ought to be made to realize his responsibility for the state.

Our human natures force us into governmental relations, in order that our lives may be richer and nobler than they could be were we to live in isolation. Complete life is possible only in the associated state. As parts of that state, with that purpose of striving for the "complete life" before us, our duties not merely as Christians or as men and women, but also as citizens, require us to care for the welfare of our fellows. Even in governmental affairs, the personal interests of citizens are largely local. Woodrow Wilson has called attention to the fact that of the twelve greatest reform measures of all kinds passed in England within the present century, only one before our civil war and only two since the war amendments would have been in this country

matters for the central government. The others would have been dealt with by the separate states. Even matters more strictly local still are of great importance to the individual. During our last presidential campaign our farmers were greatly concerned about the monetary standard, and millions of dollars were expended in attempting to change their opinions on the question. Yet any thoughtful student will concede that the prosperity of the average well-to-do farmer would be affected more, and more permanently, by a change in the quality of the road between his farm and the nearest good market town, from that of the average dirt road to that of a good macadam than he would be by any proposed change in the monetary standard. Beneficial to him as a tariff on wool might be, the chances are that in the great majority of cases the ten dollars in cash and two days in time spent in attending political rallies, if expended in battening the cracks in his sheds would have saved him more money in lambs than he will gain in the increased price of wool from the new tariff. Even the average carpenter and mason has much more real personal concern in the election of the next school teacher than in that of the next president. As a student of political science keenly interested in all matters of political controversy, I am gratified to be consulted by my next door neighbor regarding the attitude of the United States Supreme Court regarding the income tax; but as a practical business man with a small kitchen garden my real financial interest and my personal comfort and peace of mind are far more concerned in his views regarding hen coops and the moral duties of poultry keepers. I do not wish at all to minimize the duties of citizens toward our central government. Most of us are too careless in that regard; but I do wish to make it clear that we do not draw these things ordinarily with the right perspective, and that when we consider the duties of citizens from the right standpoint, we shall observe that even small children are able to find tasks suitable for citizens to comprehend and to understand the most fundamental of all political duties-honesty and fair dealing toward one's fellows.

As in our later methods of teaching geography, we begin with the school and go out thence to the town, the state, the nation, so in teaching political duties, take first those to our schoolmates and neighbors.

The essence of all good teaching, however, is the putting into practice in life the principles laid down in the books or in lectures, or, better than either, brought out by the children themselves by skillful questions. It may well be worth our while to point out some at least of the civic duties that children can perform. Many of them are often performed now without any consciousness of their public nature. When a pupil in a district school I trudged off with a comrade a quarter of a mile to bring a pail of drinking water. I believe that an added value would have been given to the delight of the outdoor freedom, if I had been made to realize that I was doing a citizen's duty, working for the public! If our children knew that the desks which they so carelessly carve and the buildings which they so wantonly deface at times belong not to an indefinite, abstract entity "the town," but to themselves, their parents, their fellows, and that an injury done to that building is robbery of their friends, they would be more careful. If they were made to see that by care of school buildings and furniture they could aid in lowering the tax rate; that by order in school and a spirit of helpfulness toward their teacher a public official -they were performing patriotic duties, their school would take on an added interest and appear of more importance Is it hard for a child twelve years of age to understand that the man who swears down his assessment unduly is practically putting his hand into his neighbor's pocket by increasing their taxes unjustly? Children trained to see what the state is and the real and close relation existing between public and private property would not be so reckless in later years in squandering public funds in foolish appropriations as are many of our legislators who look upon the public treasury as a bottomless well from which to draw good gifts for their constituents and especially for their near friends and relatives.

In some of our cities, Boston, Philadelphia, New York, "the youngsters have been formed into a Juvenile Street Cleaning Brigade." The members are pledged to pick up stray pieces of paper and deposit them in receptacles provided by the city. In one of the Chicago schools, some years ago there was a charitable organization formed among the pupils under the direction of the principal that did much practical, intelligent work, quite after the type of that done by the best societies of adults. Such practical work can be found in many fields, and in no other way can the children be so directly trained as through practice.

The most direct practical work in politics by children that I have seen is that done in the George Junior Republic at Freeville, New York, where the young people twelve to eighteen years of age make their own laws, have their own courts and police, punish their own criminals with fines and imprisonment that are not play but real locking up in real cells, real hard labor and poor food, and use a boy and girl public opinion that is even more powerful than that in adult society because it is franker and more positive. This was a real share in government that can rarely be given in schools.

But where in the school and university curriculum shall this training be given? It is evident from what has already been said that the most fundamental things, the prime essentials in training for citizenship, -lofty ideals, independence and impartiality of judgment, regard for the rights of others, -are to be taught always, in every class, in all grades, and the methods are substantially the same from kindergarten to university. As children ought to live in an atmosphere of good English, good temper, good morals, so ought they to live in an atmosphere of tolerance, independence, impartiality of judgment, regard for the rights of others, thoughtfulness regarding one's own duties-and the teacher must create this atmosphere. The turning of the attention to public duties can be begun and carried on informally, as has been suggested from the beginning; but especially in studies in literature, and history, and geography will the relations of men in society and of nations, one

with another, be brought out. Whatever may be one's idea regarding concentration and grouping of studies, all may agree that the fitting of children for service in the state should be kept prominently in mind in all the studies. In all those subjects specific information can be given -and especially in them all can pupils be led by skillful questioning to reason out for themselves the nature of the fundamental economic and political relations of trade, transportation, money, labor, of taxes, of forms of government, of the ruler and the ruled. No special formal training. with separate text-books, need be given, perhaps, in Economics, or even in Civil Government, until the college is reached, if the teachers are thoroughly alive to the opportunities for such training in kindred subjects; but probably in most high schools such subjects should be formally introduced.

In the colleges and universities, of course, should come the formal studies of Constitutional and Administrative Law and Politics, native, historical and comparative, with History, and Ethics, and Philosophy. But, I pass these with simply the mention, because, that is understood by all; but primarily because, even in the universities, where one keeps in mind the purpose of "training for citizenship," of molding men to influence society for good or evil, information in administrative law and comparative politics, even for most graduate students, is of less importance than the practice of forming impartial judgments on present political methods, and of thus learning how righteousness must rule if the state is to live. The awakening of a living interest in public affairs, the arousing of a determination to see and judge political life fairly and impartially as it is, the kindling ling of resolves in one's students' minds to stand for the best and noblest measures in the state, and never to lose sight of the fundamental purpose of civilized society, to enrich and ennoble the lives of the citizens, nor of the essential condition of success, bringing the life of the state into accord with the principles of justice and righteousness -these are still in the university as in the primary school, the most important tasks of the teacher, and those requiring the highest gifts.

It must not be forgotten, too, that these purposes should be in the mind of the mathematician and the biologist, as well as in that of the historian and politician (I use the word in its proper sense); for while the latter may have opportunity to inculcate the lesson more frequently, the occasion comes not rarely to all, and the method is, after all, mainly a matter of a living example, so far as the spirit is concerned.

So far as one deals with the study of formal principles, of course, one can to best advantage employ the inductive methods for which, in every community, an abundance of material is found.

A word should be said about educational means outside the schools and colleges, and the influence of such activity upon society. While we must expect that great social reforms which involve changes in the dispositions or habits of the people will be completed only with coming generations, still, one ought everywhere to keep good influences at work. Much can be accomplished; and some of those improvements that involve only changes in the forms of institutions, or in the relations of individuals can be often carried through by earnest people in a short time, especially if the plans have no political partisan aspect. In the winter of 1895, I saw an important law put through the New York legislature, merely as the result of a few sentences dropped in a public lecture. The idea was fruitful, was non-partisan. The result was some of the best suggestions regarding legislative methods ever made in America, suggestions that there is reason to hope will bear fruit yet in the state of their origin. Often a university extension course, or a course of study in a local club, or school, will lead to action which brings great good to the whole community. The churches ought always to be, and often are, powerful influences toward political improvement, especially when they keep out of politics and devote themselves to cultivating and practicing high ideals. And it must not be forgotten that a social reform in even one small community is often wide-reaching in its effects. Think of Pestalozzi's story of the influence of the wise Gertrude, the typical model citizen. The experiment with the

liquor traffic in Gothenburg, Sweden, has revolutionized the system in Norway and Sweden, has set reformers talking the world over, and is likely to result in untold benefit to many peoples. The methods of work outside the school are the same as those within: Give knowledge, give ideals, give impartiality, and independence, and righteousness.

To sum up our conclusions, then, good citizenship not only can be promoted by educational means, but a chief essential for ultimate success in social reforms is that we train up citizens: that the people be taught to understand better the nature of social institutions; that they realize that not all, but a large part of our social evils come not from wick edness or hard-heartedness or injustice-(though all these, too, bring evils in their train) but merely from a maladjustment of social relations. They should realize also that these evils can be overcome at times by merely slight changes in methods of social work if only students of so ciety can be found to suggest wise changes in methods But most important of all, is the education of the people to that flexibility of temperament and culture that will enable them readily to adapt themselves to new conditions. that impartiality of spirit, that judicial habit of thought, that feeling of personal responsibility which will aid them to see truth even when unwelcome, and that zeal for truth and righteousness which will lead them to be willing to do their duty, and will thus fit them to adjust themselves best to the places in which they can render to society the great est service.

PLAN OF WORK OF THE HERBART SOCIETY.

This society is now completing its second year of gressive discussion of important topics in education.

It is the well-matured plan of the society to secure the est papers within its reach on the most vital problems of merican education. These papers are printed beforehand and circulated to the members so that they may be carefully gad and weighed before the time for discussion in the teetings. The publications may then be taken home and heir practical value tested. This plan provides (what is not usual in our educational meetings) for very careful reparation of papers, thorough and complete discussion fer thoughtful reading, and the later study, testing and pplication of the theories proposed. In this way it is cheved that progress can be made toward the settlement some of our vexed questions of education.

PUBLICATIONS.

The publications already out and definitely planned are follows:

First Year-Book for 1895-

Concentration, by Frank M. McMurry.

The Culture Epochs, C. C. VanLiew.

Most Pressing Problems, Charles DeGarmo.

Course of Study for Primary Grade, Mrs. Lida McMurry.

rest Supplement to the First Year-Book. (Denver)—Discussions of the Denver Papers.

A Descriptive List of English and German Works on Herbartian Pedagogy.

cond Supplement to the First Year-Book-

Interest as Related to Will.

Also the Discussion of this Paper at Jacksonville.

ond Year-Book, 1×96. (Buffalo)—

Isolation and Unification as Bases of a Course of Study, by Emerson E. White. Reply, by Charles A. McMurry. A Symposium on the Culture Epochs. Papers by Lukens, Seeley, Brown, Dewey, McMurry, Galbreath, Hinsdale, Felmley, and VanLiew.

Present Status of the Doctrine of Interest, DeGarmo, Literature in the High School, J. Rose Colby, List of Books.

First Supplement to the Second Year-Book -Training for Citizenship, Jeremiah W. Jenks.

Second Supplement to the Second Year Book (in prospect)

Discussion of Dr. Jenks' paper and other papers on the same subject.

Third Year-Book, 1897, Milwaukee. (Planned)—
Moral Education. Papers by John Dewey, John Adams,
W. T. Harris, and Charles DeGarmo.

MEMBERSHIP.

Single membership in the National Herbart Society may be had by sending to the secretary one dollar per year (including the Year Book and two supplements). Back numbers of the Year-Books may be secured from the secretary for 50 cents each; supplements for 25 cents each Ordered in quantities there will be a reduction of 20 per cent

LOCAL CLUBS.

A plan has been in operation for the formation of local clubs of those wishing to study the Year-Books and Supple ments. Many such local clubs have been formed at Normal Schools, at Universities, by city supermtendents, and in some cases by county superintendents. When four or more persons wish to form a local club the membership is fixed at 75 cents for each person. They will elect a chairman, who will conduct the correspondence, receive the Year-Book and Supplements for the club, sending the money, and forwarding all questions and communications to the secretary of the National Society.

COURSES OF READING.

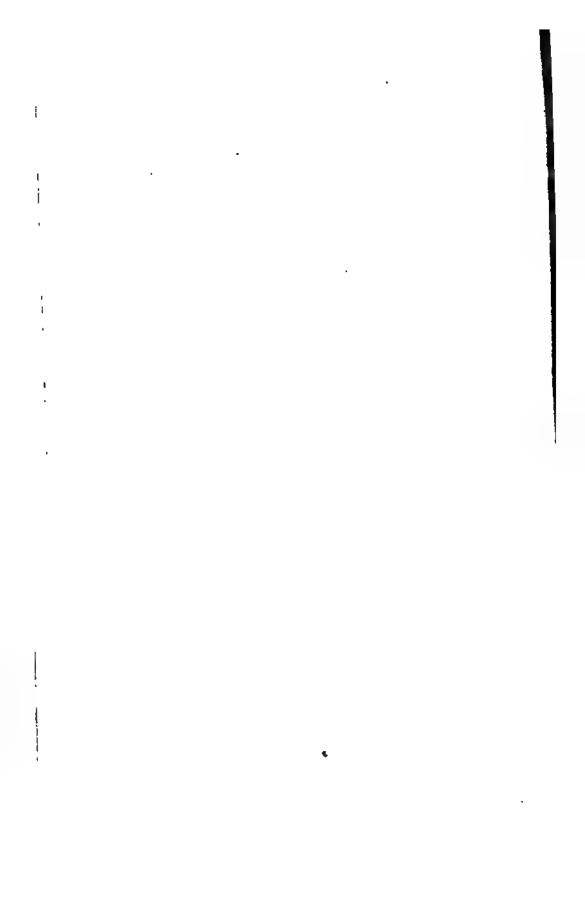
For those local clubs wishing to take up a course of reading in Herbartian pedagogy such a course is fully outlined in the First Supplement to the First Year-Book and

also in the Second Year-Book. A descriptive catalogue of the leading books in English and German is given.

The success of a local club depends largely upon the chairman, who should not only receive and distribute the Year-Books, but fix a regular time for meetings, appoint a member for each meeting who shall present a well prepared paper and assist in the discussions. In the discussion of important topics, such as concentration, apperception, interest, culture epochs, a series of comparative readings from several books should be planned.

Those wishing to become members of the National Herbart Society, either singly or in clubs, should send their membership fee to the secretary,

CHARLES A. McMurry,
Chicago University,
Chicago, Illinois.



THE

THIRD YEARBOOK

OF THE

NATIONAL HERBART SOCIETY

FOR THE SCIENTIFIC STUDY OF TEACHING

Prepared for discussion at the Milwaukee meeting of the National Educational Association

1897

EDITED BY
CHARLES A. McMURRY
THE UNIVERSITY OF CHICAGO

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THE UNIVERSITY OF CHICAGO

PREFACE.

The Third Yearbook of the National Herbart Society is given largely to the discussion of a single topic—Moral Education.

Each of these four papers will be discussed at the sessions of the National Herbart Society at the Milwaukee meeting of the National Educational Association.

A number of the most eminent educators in the country have promised to lead in the discussions.

The Supplement, which is printed as a part of this Yearbook, continues the discussion of Dr. J. W. Jenks' paper on Training for Citizenship. It consists partly of discussions on this topic at the Indianapolis meeting of the Department of Superintendence and partly of papers offered at the Galesburg meeting of Central Illinois teachers.

All those interested in the papers on Moral Education should read them carefully before going to the Milwaukee meeting. Only in this way can a profitable discussion of the papers be secured at the meeting.

It is suggested that leaders of local clubs arrange one or two meetings in June for the reading and discussion of the Yearbook.

At the close of this Yearbook will be found a statement of the organization of the Herbart Society and the terms of membership in clubs and singly.

The Yearbooks can be ordered of the Secretary,

CHARLES A. McMurry,

The University of Chicago,

Chicago, Ill.

THE EXECUTIVE COUNCIL

OF THE NATIONAL HERBART SOCIETY.

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THE THIRD YEARBOOK

ETHICAL PRINCIPLES UNDERLYING EDUCATION.

By JOHN DEWEY, Ph.D., The University of Chicago.

It is quite clear that there cannot be two sets of ethical principles, or two forms of ethical theory, one for life in the school, and the other for life outside of the school. As conduct is one, the principles of conduct are one also. The frequent tendency to discuss the morals of the school, as if the latter were an institution by itself, and as if its morale could be stated without reference to the general scientific principles of conduct, appears to me highly unfortunate. Principles are the same. It is the special points of contact and application which vary with different conditions. I shall make no apology, accordingly, for commencing with statements which seem to me of universal validity and scope, and afterwards considering the moral work of the school as a special case of these general principles. I may be forgiven also for adding that the limits of space forbid much in the way of amplification and qualification, and that, so far as form is concerned, the material will therefore be presented in somewhat dogmatic shape. I hope, however, it will not be found dogmatic in spirit, for the principles stated are all of them, in my judgment, capable of purely scientific justification.

All ethical theory is two faced. It requires to be considered from two different points of view, and stated in two different sets of terms. These are the social and the psychological. We do not have here, however, a division, but simply a distinction. Psychological ethics does not cover part of the field, and then require social ethics to include the territory left untouched. Both cover the entire sphere of conduct. Nor does the distinction mark a compromise, or a fusion, as if at one point the psychological view broke down, and needed to be supplemented by the sociological. Each theory is complete and coherent

within itself, so far as its own end or purpose is concerned. But conduct is of such a nature as to require to be stated throughout from two points of view. How this distinction happens to exist may perhaps be guessed at by calling to mind that the individual and society are neither opposed to each other nor separated from each other. Society is a society of individuals and the individual is always a social individual. He has no existence by himself. He lives in, for, and by society, just as society has no existence excepting in and through the individuals who constitute it. But we can state one and the same process (as, for example, telling the truth) either from the standpoint of what it effects in society as a whole, or with reference to the particular individual concerned. The latter statement will be psychological; the former, social as to its purport and terms.

If, then, the difference is simply a point of view, we first need to find out what fixes the two points of view. Why are they necessary? Because conduct itself has two aspects. On one side conduct is a form of activity. It is a mode of operation. It is something which somebody does. There is no conduct excepting where there is an agent. From this standpoint conduct is a process having its own form or mode, having, as it were, its own running machinery. That is, it is something which the agent does in a certain way; something which is an outcome of the agent himself, and which effects certain changes within the agent considered as an agent or doer. Now when we ask how conduct is carried on, what sort of a doing it is, when, that is to say, we discuss it with reference to an agent from whom it springs, and whose powers it modifies, our discussion is necessarily psychological. Psychology thus fixes for us the how of conduct, the way in which it takes place. Consideration from this standpoint is necessary because it is obvious that modifications in results or products must flow from changes in the agent or doer. If we want to get different things done, we must begin with changing the machinery which does them.

I hope the term "machinery" here will not be misunderstood by being taken in too dead and mechanical a sense. All that is meant here is that the mode of action of the individual agent controls the product, or what is done, just as the way in which a particular machine works controls the output in that direction. The individual agent has a certain structure, and certain ways of operating. It is simply this which is referred to as machinery.

But conduct has a what as well as a how. There is something

done as well as a way in which it is done. There are ends, outcomes, results, as well as ways, means, and processes. Now when we consider conduct from this standpoint (with reference, that is to say, to its actual filling, content, or concrete worth) we are considering conduct from a social standpoint—from the place which it occupies, not simply with reference to the person who does it, but with reference to the whole living situation into which it enters.

The psychological view of conduct has to do, then, with the question of agency, of how the individual operates; the social, with what the individual does and needs to do, considered from the standpoint of his membership in a whole which is larger than himself.

We may illustrate by reference to business life. A man starts in a business of manufacturing cotton cloth. Now this occupation of his may be considered from two standpoints. The individual who makes the cloth does not originate the demand for it. Society needs the cloth, and thereby furnishes the end or aim to the individual. It needs a certain amount of cloth, and cloth of certain varying qualities and patterns. It is this situation outside the mere operations of the manufacturer which fixes the meaning and value of what he does. If it were not for these social needs and demands, the occupation of the manufacturer would be purely formal. He might as well go out into the wilderness and heap up and tear down piles of sand.

But on the other side society must have its needs met, its ends realized, through the activities of some specific individual or group of individuals. The needs will forever go unsatisfied unless somebody takes it as his special business to supply them. So we may consider the manufactory of cotton cloth, not only from the standpoint of the position which it occupies in the larger social whole, but also as a mode of operation which simply as a mode is complete in itself. After the manufacturer has determined the ends which he has to meet (the kinds and amounts of cloth he needs to produce) he has to go to work to consider the cheapest and best modes of producing them, and of getting them to the market. He has to transfer his attention from the ends to the means. He has to see how to make his factory, considered as a mode of activity, the best possible organized agency within itself. No amount of reflection upon how badly society needs cloth will help him here. He has to think out his problem in terms of the number and kind of machines which he will use, the number of men which he will employ, how much he will pay them, how and where he will buy his raw

material, and through what instrumentalities he will get his goods to the market. Now while this question is ultimately only a means to the larger social end, yet in order that it may become a true means, and accomplish the work which it has to do, it must become, for the time being, an end in itself. It must be stated, in other words, in terms of the factory as a working agency.

I think this parallelism may be applied to moral conduct without the change of a single principle. It is not the mere individual as an individual who makes the final demand for moral action, who establishes the final end, or furnishes the final standards of worth. It is the constitution and development of the larger life into which he enters which settles these things. But when we come to the question of how the individual is to meet the moral demands, of how he is to realize the values within himself, the question is one which concerns the individual as an agent. Hence it must be answered in psychological terms.

Let us change the scene of discussion to the school. The child who is educated there is a member of society and must be instructed and cared for as such a member. The moral responsibility of the school, and of those who conduct it, is to society. The school is fundamentally an institution erected by society to do a certain specific work—to exercise a certain specific function in maintaining the life and advancing the welfare of society. The educational system which does not recognize this fact as entailing upon it an ethical responsibility is derelict and a defaulter. It is not doing what it was called into existence to do, and what it pretends to do. Hence the necessity of discussing the entire structure and the specific workings of the school system from the standpoint of its moral position and moral function to society.

The above is commonplace. But the idea is ordinarily taken in too limited and rigid a way. The social work of the school is often limited to training for citizenship, and citizenship is then interpreted in a narrow sense as meaning capacity to vote intelligently, a disposition to obey laws, etc. But it is futile to contract and cramp the ethical responsibility of the school in this way. The child is one, and he must either live his life as an integral unified being or suffer loss and create friction. To pick out one of the manifold social relations which the child bears, and to define the work of the school with relation to that, is like instituting a vast and complicated system of physical exercise

which would have for its object simply the development of the lungs and the power of breathing, independent of other organs and functions. The child is an organic whole, intellectually, socially, and morally, as well as physically. The ethical aim which determines the work of the school must accordingly be interpreted in the most comprehensive and organic spirit. We must take the child as a member of society in the broadest sense and demand whatever is necessary to enable the child to recognize all his social relations and to carry them out.

The child is to be not only a voter and a subject of law; he is also to be a member of a family, himself responsible, in all probability, in turn, for rearing and training of future children, and thus maintaining the continuity of society. He is to be a worker, engaged in some occupation which will be of use to society, and which will maintain his own independence and self-respect. He is to be a member of some particular neighborhood and community, and must contribute to the values of life, add to the decencies and graces of civilization wherever he is. These are bare and formal statements, but if we let our imagination translate them into their concrete details we have a wide and varied scene. For the child properly to take his place with reference to these various functions means training in science, in art, in history; command of the fundamental methods of inquiry and the fundamental tools of intercourse and communication; it means a trained and sound body, skillful eye and hand; habits of industry, perseverance, and, above all, habits of serviceableness. To isolate the formal relationship of citizenship from the whole system of relations with which it is actually interwoven; to suppose that there is any one particular study or mode of treatment which can make the child a good citizen; to suppose, in other words, that a good citizen is anything more than a thoroughly efficient and serviceable member of society, one with all his powers of body and mind under control, is a cramped superstition which it is hoped may soon disappear from educational discussion.

One point more. The society of which the child is to be a member is, in the United States, a democratic and progressive society. The child must be educated for leadership as well as for obedience. He must have power of self-direction and power of directing others, powers of administration, ability to assume positions of responsibility. This necessity of educating for leadership is as great on the industrial as on the political side. The affairs of life are coming more and more under the control of insight and skill in perceiving and effecting combinations.

Moreover, the conditions of life are in continual change. We are in the midst of a tremendous industrial and commercial development. New inventions, new machines, new methods of transportation and intercourse are making over the whole scene of action year by year. It is an absolute impossibility to educate the child for any fixed station in life. So far as education is conducted unconsciously or consciously on this basis, it results in fitting the future citizen for no station in life, but makes him a drone, a hanger-on, or an actual retarding influence in the onward movement. Instead of caring for himself and for others, he becomes one who has himself to be cared for. Here, too, the ethical responsibility of the school on the social side must be interpreted in the broadest and freest spirit; it is equivalent to that training of the child which will give him such possession of himself that he may take charge of himself; may not only adapt himself to the changes which are going on, but have power to shape and direct those changes.

It is necessary to apply this conception of the child's membership in society more specifically to determining the ethical principles of education.

Apart from the thought of participation in social life the school has no end nor aim. As long as we confine ourselves to the school as an isolated institution we have no final directing ethical principles, because we have no object or ideal. But it is said the end of education may be stated in purely individual terms. For example, it is said to be the harmonious development of all the powers of the individual. Here we have no apparent reference to social life or membership, and yet it is argued we have an adequate and thoroughgoing definition of what the goal of education is. But if this definition is taken independently of social relationship we shall find that we have no standard or criterion for telling what is meant by any one of the terms concerned. We do not know what a power is; we do not know what development is; we do not know what harmony is; a power is a power with reference to the use to which it is put, the function it has to serve. There is nothing in the make-up of the human being, taken in an isolated way, which furnishes controlling ends and serves to mark out powers. If we leave out the aim supplied from social life we have nothing but the old "faculty psychology" to fall back upon to tell what is meant by power in general or what the specific powers are. The idea reduces itself to enumerating a lot of faculties like perception, memory, reasoning, etc., and then stating that each one of these powers needs to be developed.

But this statement is barren and formal. It reduces training to an empty gymnastic.

Acute powers of observation and memory might be developed by studying Chinese characters; acuteness in reasoning might be got by discussion of the scholastic subtleties of the Middle Ages. The simple fact is that there is no isolated faculty of observation, or memory, or reasoning any more than there is an original faculty of blacksmithing, carpentering, or steam engineering. These faculties simply mean that particular impulses and habits have been coordinated and framed with reference to accomplishing certain definite kinds of work. Precisely the same thing holds of the so-called mental faculties. They are not powers in themselves, but are such only with reference to the ends to which they are put, the services which they have to perform. Hence they cannot be located nor discussed as powers on a theoretical, but only on a practical basis. We need to know the social situations with reference to which the individual will have to use ability to observe, recollect, imagine, and reason before we get any intelligent and concrete basis for telling what a training of mental powers actually means either in its general principles or in its working details.

We get no moral ideals, no moral standards for school life excepting as we so interpret in social terms. To understand what the school is actually doing, to discover defects in its practice, and to form plans for its progress means to have a clear conception of what society requires and of the relation of the school to these requirements. It is high time, however, to apply this general principle so as to give it a somewhat more definite content. What does the general principle signify when we view the existing school system in its light? What defects does this principle point out? What changes does it indicate?

The fundamental conclusion is that the school must be itself made into a vital social institution to a very much greater extent than obtains at present. I am told that there is a swimming school in the city of Chicago where youth are taught to swim without going into the water, being repeatedly drilled in the various movements which are necessary for swimming. When one of the young men so trained was asked what he did when he got into the water, he laconically replied, "Sunk." The story happens to be true; if it were not, it would seem to be a lable made expressly for the purpose of typifying the prevailing status of the school, as judged from the standpoint of its ethical relationship to society. The school cannot be a preparation for social life excepting

as it reproduces, within itself, the typical conditions of social life. The school at present is engaged largely upon the futile task of Sisyphus. It is endeavoring to form practically an intellectual habit in children for use in a social life which is, it would almost seem, carefully and purposely kept away from any vital contact with the child who is thus undergoing training. The only way to prepare for social life is to engage in social life. To form habits of social usefulness and service-ableness apart from any direct social need and motive, and apart from any existing social situation, is, to the letter, teaching the child to swim by going through motions outside of the water. The most indispensable condition is left out of account, and the results are correspondingly futile.

The much and commonly lamented separation in the schools between intellectual and moral training, between acquiring information and growth of character, is simply one expression of the failure to conceive and construct the school as a social institution, having social life and value within itself. Excepting in so far as the school is an embryonic yet typical community life, moral training must be partly pathological and partly formal. It is pathological masmuch as the stress comes to be laid upon correcting wrongdoing instead of upon forming habits of positive service. The teacher is necessarily forced into a position where his concern with the moral life of the pupils takes largely the form of being on the alert for failures to conform to the school rules and routine. These regulations, judged from the standpoint of the development of the child at the time, are more or less conventional and arbitrary. They are rules which have to be made in order that the existing modes of school work may go on; but the lack of inherent necessity in the school work reflects itself in a feeling, on the part of the child, that the moral discipline of the school is somewhat arbitrary. Any conditions which compel the teacher to take note of failures rather than of healthy growth put the emphasis in the wrong place and result in distortion and perversion. Attending to wrongdoing ought to be an incident rather than the important phase. The child ought to have a positive consciousness of what he is about, and to be able to judge and criticise his respective acts from the standpoint of their reference to the work which he has to do. Only in this way does he have a normal and healthy standard, enabling him properly to appreciate his failures and to estimate them at their right value.

By saying that the moral training of the school is partly formal, I

mean that the moral habits which are specially emphasized in the school are habits which are created, as it were, ad hoc. Even the habits of promptness, regularity, industry, non-interference with the work of others, faithfulness to tasks imposed, which are specially inculcated in the school, are habits which are morally necessary simply because the school system is what it is, and must be preserved intact. If we grant the inviolability of the school system as it is, these habits represent permanent and necessary moral ideas; but just in so far as the school system is itself isolated and mechanical, the insistence upon these moral habits is more or less unreal, because the ideal to which they relate is not itself necessary. The duties, in other words, are distinctly school duties, not life duties. If we compare this with the well-ordered home, we find that the duties and responsibilities which the child has to recognize and assume there are not such as belong to the family as a specialized and isolated institution, but flow from the very nature of the social life in which the family participates and to which it contributes. The child ought to have exactly the same motives for right doing, and be judged by exactly the same standard in the school, as the adult in the wider social life to which he belongs. Interest in the community welfare, an interest which is intellectual and practical, as well as emotional - an interest, that is to say, in perceiving whatever makes for social order and progress, and for carrying these principles into execution - is the ultimate ethical habit to which all the special school habits must be related if they are to be animated by the breath of moral life.

We may apply this conception of the school as a social community which reflects and organizes in typical form the fundamental principles of all community life, to both the methods and the subject-matter of instruction.

As to methods, this principle when applied means that the emphasis must be upon construction and giving out, rather than upon absorption and mere learning. We fail to recognize how essentially individualistic the latter methods are, and how unconsciously, yet certainly and effectively, they react into the child's ways of judging and of acting. Imagine forty children all engaged in reading the same books, and in preparing and reciting the same lessons day after day. Suppose that this constitutes by far the larger part of their work, and that they are continually judged from the standpoint of what they are able to take in in a study hour, and to reproduce in a recitation hour. There is next

to no opportunity here for any social or moral division of labor. There is no opportunity for each child to work out something specifically his own, which he may contribute to the common stock, while he, in turn, participates in the productions of others. All are set to do exactly the same work and turn out the same results. The social spirit is not cultivated - in fact, in so far as this method gets in its work, it gradually atrophies for lack of use. It is easy to see, from the intellectual side, that one reason why reading aloud in school is as poor as it is is that the real motive for the use of language-the desire to communicate and to learn - is not utilized. The child knows perfectly well that the teacher and all his fellow pupils have exactly the same facts and ideas before them that he has; he is not giving them anything at all new. But it may be questioned whether the moral lack is not as great as the intellectual. The child is born with a natural desire to give out, to do, and that means to serve. When this tendency is not made use of, when conditions are such that other motives are substituted, the reaction against the social spirit is much larger than we have any idea of-especially when the burden of the work, week after week, and year after year, falls upon this side.

But lack of cultivation of the social spirit is not all. Positively individualistic motives and standards are inculcated. Some stimulus must be found to keep the child at his studies. At the best this will be his affection for his teacher, together with a feeling that in doing this he is not violating school rules, and thus is negatively, if not positively, contributing to the good of the school. I have nothing to say against these motives as far as they go, but they are inadequate. The relation between the piece of work to be done and affection for a third person is external, not intrinsic. It is therefore hable to break down whenever the external conditions are changed. Moreover this attachment to a particular person, while in a way social, may become so isolated and exclusive as to be positively selfish in quality. In any case, it is necessary that the child should gradually grow out of this relatively external motive, into an appreciation of the social value of what he has to do for its own sake, and because of its relations to life as a whole, not as pinned down to two or three people.

But unfortunately the motive is not always at this relative best, while it is always mixed with lower motives which are distinctly individualistic. Fear is a motive which is almost sure to enter in—not necessarily physical fear, or of punishment, but fear of losing the

approbation of others; fear of failure so extreme and sensitive as to be morbid. On the other side, emulation and rivalry enter in. Just because all are doing the same work, and are judged (both in recitation and in examination, with reference to grading and to promotion) not from the standpoint of their motives or the ends which they are trying to reach, the feeling of superiority is unduly appealed to. The children are judged with reference to their capacity to present the same external set of facts and ideas. As a consequence they must be placed in the hierarchy on the basis of this purely objective standard. The weaker gradually lose their sense of capacity, and accept a position of continuous and persistent inferiority. The effect of this upon both self-respect and respect for work need not be dwelt upon. The stronger grow to glory, not in their strength, but in the fact that The child is prematurely launched into the region they are stronger. of individualistic competition, and this in a direction where competition is least applicable, viz., in intellectual and spiritual matters, whose law is cooperation and participation.

I cannot stop to paint the other side. I can only say that the introduction of every method which appeals to the child's active powers, to his capacities in construction, production, and creation, marks an opportunity to shift the center of ethical gravity from an absorption which is selfish to a service which is social. I shall have occasion later on to speak of these same methods from the psychological side, that is, their relation to the development of the particular powers of the child. I am here speaking of these methods with reference to the relation which they bear to a sense of community life, to a feeling of a division of labor which enables each one to make his own contribution, and to produce results which are to be judged not simply as intellectual results but from the motive of devotion to work, and of usefulness to others.

Manual training is more than manual; it is more than intellectual; in the hands of any good teacher it lends itself easily, and almost as a matter of course, to development of social habits. Ever since the philosophy of Kant it has been a commonplace in the theory of art, that one of its indispensable features is that it be universal, that is, that it should not be the product of any purely personal desire or appetite, or be capable of merely individual appropriation, but should have its value participated in by all who perceive it.

The divorce between the intellectual and the moral must inevitably

continue in our schools (in spite of the efforts of individual teachers) as long as there is a divorce between learning; and doing. The attempt to attach genuine moral consideration to the mere processes of learning, and to the habits which go along with learning, can result only in a moral training which is infected with formality, arbitrariness, and an undue emphasis upon failure to conform. That as much is accomplished as actually is done only shows the possibilities which would go along with the more organic ethical relationships involved in methods of activity which would afford opportunity for reciprocity, cooperation, and mutual service.

The principle of the school as itself a representative social institution may be applied to the subject-matter of instruction—must be applied if the divorce between information and character is to be overcome.

A casual glance at pedagogical literature will show that we are much in need of an ultimate criterion for the values of studies, and for deciding what is meant by content value and by form value. At present we are apt to have two, three, or even four different standards set up, by which different values—as disciplinary, culture, and information values—are measured. There is no conception of any single unifying principle. The point here made is that the extent and way in which a study brings the pupil to consciousness of his social environment, and confers upon him the ability to interpret his own powers from the standpoint of their possibilities in social use, is this ultimate and unified standard.

The distinction of form and content value is becoming familiar, but, so far as I know, no attempt has been made to give it rational basis. I submit the following as the key to the distinction: A study from a certain point of view serves to introduce the child to a consciousness of the make-up or structure of social life; from another point of view, it serves to introduce him to a knowledge of, and command over, the instrumentalities through which the society carries itself along. The former is the content value; the latter is the form value. Form is thus in no sense a term of depreciation. Form is as necessary as content. Form represents, as it were, the technique, the adjustment of means involved in social action, just as content refers to the realized value or end of social action. What is needed is not a depreciation of form, but a correct placing of it, that is, seeing that since it is related as means to end, it must be kept in subordination to

an end, and taught in relation to the end. The distinction is ultimately an ethical one because it relates not to anything found in the study from a purely intellectual or logical point of view, but to the studies considered from the standpoint of the ways in which they develop a consciousness of the nature of social life, in which the child is to live.

I take up the discussion first from the side of content. The contention is that a study is to be considered as bringing the child to realize the social scene of action; that when thus considered it gives a criterion for the selection of material and for the judgment of value. At present, as already suggested, we have three independent values set up: one of culture, another of information, and another of discipline. In reality these refer only to three phases of social interpretation. Information is genuine or educative only in so far as it effects definite images and conceptions of material placed in social life. Discipline is genuine and educative only as it represents a reaction of the information into the individual's own powers so that he can bring them under control for social ends. Culture, if it is to be genuine and educative, and not an external polish or factitious varnish, represents the vital union of information and discipline. It designates the socialization of the individual in his whole outlook upon life and mode of dealing with it.

This abstract point may be illustrated briefly by reference to a few of the school studies. In the first place there is no line of demarkation within facts themselves which classifies them as belonging to science, history, or geography, respectively. The pigeonhole classification which is so prevalent at present (fostered by introducing the pupil at the outset into a number of different studies contained in different text-books) gives an utterly erroneous idea of the relations of studies to each other, and to the intellectual whole to which they all belong. In fact these subjects have all to do with the same ultimate reality, namely, the conscious experience of man. It is only because we have different interests, or different ends, that we sort out the material and label part of it science, part history, part geography, and so on. Each of these subjects represents an arrangement of materials with reference to some one dominant or typical aim or process of the social life.

This social criterion is necessary not only to mark off the studies from each other, but also to grasp the reasons for the study of each

and the motives in connection with which it should be presented. How, for example, shall we define geography? What is the unity in the different so-called divisions of geography -- as mathematical geography, physical geography, political geography, commercial geography? Are these purely empirical classifications dependent upon the brute fact that we run across a lot of different facts which cannot be connected with one another, or is there some reason why they are all called geography, and is there some intrinsic principle upon which the material is distributed under these various heads? I understand by intrinsic not something which attaches to the objective facts themselves, for the facts do not classify themselves, but something in the interest and attitude of the human mind towards them. This is a large question and it would take an essay longer than this entire paper adequately to answer it. I raise the question partly to indicate the necessity of going back to more fundamental principles if we are to have any real philosophy of education, and partly to afford, in my answer, an illustration of the principle of social interpretation. I should say that geography has to do with all those aspects of social life which are concerned with the interaction of the life of man and nature; or, that it has to do with the world considered as the scene of social interaction. Any fact, then, will be a geographical fact in so far as it bears upon the dependence of man upon his natural environment, or with the changes introduced in this environment through the life of man.

The four forms of geography referred to above represent then four increasing stages of abstraction in discussing the mutual relation of human life and nature. The beginning must be the commercial geography. I mean by this that the essence of any geographical fact is the consciousness of two persons, or two groups of persons, who are at once separated and connected by the physical environment, and that the interest is in seeing how these people are at once kept apart and brought together in their actions by the instrumentality of this physical environment. The ultimate significance of lake, river, mountain, and plain is not physical but social; it is the part which it plays in modifying and functioning human relationship. This evidently involves an extension of the term commercial. It has not to do simply with business, in the narrow sense, but includes whatever relates to human intercourse and intercommunication as affected by natural forms and properties. Political geography represents this same social interaction taken in a static instead of in a dynamic way; takes it, that is, as temporarily crystallized and fixed in certain forms. Physical geography (including under this not simply physiography, but also the study of flora and fauna) represents a further analysis or abstraction. It studies the conditions which determine human action, leaving out of account, temporarily, the ways in which they concretely do this. Mathematical geography simply carries the analysis back to more ultimate and remote conditions, showing that the physical conditions themselves are not ultimate, but depend upon the place which the world occupies in a larger system. Here, in other words, we have traced, step by step, the links which connect the immediate social occupations and interactions of man back to the whole natural system which ultimately conditioned them. Step by step the scene is enlarged and the image of what enters into the make-up of social action is widened and broadened, but at no time ought the chain of connection to be broken.

It is out of the question to take up the studies one by one and show that their meaning is similarly controlled by social consideration. But I cannot forbear a word or two upon history. History is vital or dead to the child according as it is or is not presented from the sociological standpoint. When treated simply as a record of what has passed and gone, it must be mechanical because the past, as the past, is remote. It no longer has existence and simply as past there is no motive for attending to it. The ethical value of history teaching will be measured by the extent to which it is treated as a matter of analysis of existing social relations—that is to say as affording insight into what makes up the structure and working of society.

This relation of history to comprehension of existing social forces is apparent whether we take it from the standpoint of social order or from that of social progress. Existing social structure is exceedingly complex. It is practically impossible for the child to attack it en masse and get any definite mental image of it. But type phases of historical development may be selected which will exhibit, as through a telescope, the essential constituents of the existing order. Greece, for example, represents what art and the growing power of individual expression stands for; Rome exhibits the political elements and determining forces of political life on a tremendous scale. Or, as these civilizations are themselves relatively complex, a study of still simpler forms of hunting, nomadic and agricultural life in the beginnings of civilization; a study of the effects of the introduction of iron, iron tools, and so forth, serves to reduce the existing complexity to its simple elements.

One reason historical teaching is usually not more effective is the fact that the student is set to acquire information in such a way that no epochs or factors stand out to his mind as typical; everything is reduced to the same dead level. The only way of securing the necessary perspective is by relating the past to the present, as if the past were a projected present in which all the elements are enlarged.

The principle of contrast is as important as that of similarity. Because the present life is so close to us, touching us at every point, we cannot get away from it to see it as it really is. Nothing stands out clearly or sharply as characteristic. In the study of past periods attention necessarily attaches itself to striking differences. Thus the child gets a locus in imagination, through which he can remove himself from the present pressure of surrounding circumstance and define it.

History is equally available as teaching the methods of social progress. It is commonly stated that history must be studied from the standpoint of cause and effect. The truth of this statement depends upon its interpretation. Social life is so complex and the various parts of it are so organically related to each other and to the natural environment that it is impossible to say that this or that thing is cause of some other particular thing. But what the study of history can effect is to reveal the main instruments in the way of discoveries, inventions, new modes of life, etc., which have initiated the great epochs of social advance, and it can present to the child's consciousness type illustrations of the main lines in which social progress has been made most easily and effectively and can set before him what the chief difficulties and obstructions have been. Progress is always rhythmic in its nature, and from the side of growth as well as from that of status or order it is important that the epochs which are typical should be selected. This once more can be done only in so far as it is recognized that social forces in themselves are always the same - that the same kind of influences were at work 100 and 1000 years ago that are now and treating the particular historical epochs as affording illustration of the way in which the fundamental forces work.

Everything depends then upon history being treated from a social standpoint, as manifesting the agencies which have influenced social development, and the typical institutions in which social life has expressed itself. The culture epoch theory, while working in the right direction, has failed to recognize the importance of treating past

periods with relation to the present - that is, as affording insight into the representative factors of its structure; it has treated these periods too much as if they had some meaning or value in themselves. The way in which the biographical method is handled illustrates the same point. It is often treated in such a way as to exclude from the child's consciousness (or at least not sufficiently to emphasize) the social forces and principles involved in the association of the masses of men. It is quite true that the child is interested easily in history from the biographical standpoint; but unless the hero is treated in relation to the community life behind which he both sums up and directs, there is danger that the history will reduce itself to a mere story. When this is done moral instruction reduces itself to drawing certain lessons from the life of the particular personalities concerned, instead of having widened and deepened the child's imaginative consciousness of the social relationships, ideals, and means involved in the world in which he lives.

There is some danger, I presume, in simply presenting the illustrations without more development, but I hope it will be remembered that I am not making these points for their own sake, but with reference to the general principle that when history is taught as a mode of understanding social life it has positive ethical import. What the normal child continuously needs is not so much isolated moral lessons instilling in him the importance of truthfulness and honesty, or the beneficent results that follow from some particular act of patriotism, etc. It is the formation of habits of social imagination and conception. I mean by this it is necessary that the child should be forming the habit of interpreting the special incidents that occur and the particular situations that present themselves in terms of the whole social life. The evils of the present industrial and political situation, on the ethical side, are not due so much to actual perverseness on the part of individuals concerned, nor in mere ignorance of what constitutes the ordinary virtues (such as honesty, industry, purity, etc.) as to inability to appreciate the social environment in which we live. It is tremendously complex and confused. Only a mind trained to grasp social situations, and to reduce them to their simpler and typical elements, can get sufficient hold on the realities of this life to see what sort of action, critical and constructive, it really demands. Most people are left at the mercy of tradition, impulse, or the appeals of those who have special and class interests to serve. In relation to this highly

complicated social environment, training for citizenship is formal and nominal unless it develops the power of observation, analysis, and inference with respect to what makes up a social situation and the agencies through which it is modified. Because history rightly taught is the chief instrumentality for accomplishing this, it has an ultimate ethical value.

I have been speaking so far of the school curriculum on the side of its content. I now turn to that of form; understanding by this term, as already explained, a consciousness of the instruments and methods which are necessary to the control of social movements. Studies cannot be classified into form studies and content studies. Every study has both sides. That is to say, it deals both with the actual make-up of society, and is concerned with the tools or machinery by which society maintains itself. Language and literature best illustrate the impossibility of separation. Through the ideas contained in language, the continuity of the social structure is effected. From this standpoint the study of literature is a content study. But language is also distinctly a means, a tool. It not simply has social value in itself, but is a social instrument. However, in some studies one side or the other predominates very much, and in this sense we may speak of specifically form studies. As, for example, mathematics.

My illustrative proposition at this point is that mathematics does, or does not, accomplish its full ethical purpose according as it is presented, or not presented, as such a social tool. The prevailing divorce between information and character, between knowledge and social action, stalks upon the scene here. The moment mathematical study is severed from the place which it occupies with reference to use in social life, it becomes unduly abstract, even from the purely intellectual side. It is presented as a matter of technical relations and formulæ apart from any end or use. What the study of number suffers from in elementary education is the lack of motivation. Back of this and that and the other particular bad method is the radical mistake of treating number as if it were an end in itself instead of as a means of accomplishing some end. Let the child get a consciousness of what the use of number is, of what it really is for, and half the battle is won. Now this consciousness of the use or reason implies some active end in view which is always implicitly social since it involves the production of something which may be of use to others, and which is often explicitly social.

One of the absurd things in the more advanced study of arithmetic is the extent to which the child is introduced to numerical operations which have no distinctive mathematical principles characterizing them but which represent certain general principles found in business relationships. To train the child in these operations, while paying no attention to the business realities in which they will be of use, and the conditions of social life which make these business activities necessary, is neither arithmetic nor common sense. The child is called upon to do examples in interest, partnership, banking, brokerage, and so on through a long string, and no pains are taken to see that, in connection with the arithmetic, he has any sense of the social realities involved. This part of arithmetic is essentially sociological in its nature. It ought either to be omitted entirely or else taught in connection with a study of the relevant social realities. As we now manage the study it is the old case of learning to swim apart from the water over again, with correspondingly bad results on the practical and ethical side.1

I am afraid one question still haunts the reader. What has all this discussion about geography, history, and number, whether from the side of content or that of form, got to do with the underlying principles of education? The very reasons which induce the reader to put this question to himself, even in a half-formed way, illustrate the very point which I am trying to make. Our conceptions of the ethical in education have been too narrow, too formal, and too pathological. We have associated the term ethical with certain special acts which are labeled virtues and set off from the mass of other acts, and still more from the habitual images and motives in the agents performing them. Moral instruction is thus associated with teaching about these particular virtues, or with instilling certain sentiments in regard to them. The ethical has been conceived in too goody-goody a way. But it is not such ethical ideas and motives as these which keep men at work in recognizing and performing their moral duty. Such teaching as this,

*With increasing mental maturity, and corresponding specialization which naturally accompanies it, these various instrumentalities may become ends in themselves. That is, the child may, as he ripens into the period of youth, be interested in number relations for their own sake. What was once method may become an activity in itself. The above statement is not directed against this possibility. It is simply aimed at the importance of seeing to it that the preliminary period—that in which the form or means is kept in organic relationship to real ends and values—is adequately lived through.

after all is said and done, is external; it does not reach down into the depths of the character making agency. Ultimate moral motives and forces are nothing more nor less than social intelligence—the power of observing and comprehending social situations—and social power—trained capacities of control—at work in the service of social interest and aims. There is no fact which throws light upon the constitution of society, there is no power whose training adds to social resourcefulness which is not ethical in its bearing.

I sum up, then, this part of the discussion by asking your attention to the moral trinity of the school. The demand is for social intelligence, social power, and social interests. Our resources are (1) the life of the school as a social institution in itself; (2) methods of learning and of doing work; and (3) the school studies or curriculum. In so far as the school represents, in its own spirit, a genuine community life; in so far as what are called school discipline, government, order, etc., are the expressions of this inherent social spirit; in so far as the methods used are those which appeal to the active and constructive powers, permitting the child to give out, and thus to serve; in so far as the curriculum is so selected and organized as to provide the material for affording the child a consciousness of the world in which he has to play a part, and the relations he has to meet; in so far as these ends are met, the school is organized on an ethical basis. So far as general principles are concerned, all the basic ethical requirements are met. The rest remains between the individual teacher and the individual child.

II.

I pass over now to the other side of the discussion—the psychological. We have so far been concerned with the principle that the end and standard of the school work is to be found in its functional relation to social life. We have endeavored to apply this principle to some of the typical features of the school in order to give an illustration of what is meant by this statement. We now recur to the counterpart principle: These ends and aims are to be realized in the child as an individual, and by the child as an individual. The social values are abstract until they are taken up and manifested in the life of the individual pupils. We have to ask, therefore, what they mean when translated over into terms of individual conduct. These values are not only to be manifested in individual conduct, but they are to be worked

out by individual effort and energy. We have to consider the child as an agent or doer—the methods by which he can reproduce in his own life the constituent values of social life.

The beginning has to be made with the observation of the individual child. We find in him certain dawning powers-instincts and impulses. We wish to know what these stand for-what they represent. This means an inquiry into the ends with respect to which they can function, or become organized instruments of action. This interpretation of the crude powers of the child takes us over into social life. We find there the answers to the questions which the child nature puts to us; we find the completed results which enable us to diagnose the symptoms and indications spontaneously exhibited in the child. Then we have to return again with this interpretation back to the individual in order to find out the easiest, most economical, and most effective points of attachment and relationship between the spontaneous activities of the child, and the aims which we expect these powers to realize. Our business is now to connect the two. This can be done only through the medium of the child himself; the teacher cannot really make the connection. He can only form the conditions in such a way that the child may make it for himself. Moreover, even if the teacher could make the connection, the result would not be ethical. The moral life is lived only as the individual appreciates for himself the ends for which he is working, and does his work in a personal spirit of interest and devotion to these ends. Consequently we are again thrown back upon a study of the individual; upon psychology in order to discover the means which are available to mediate the spontaneous and crude capacities of the child over into habits of social intelligence and responsive-

Now, it is psychology which reveals to us the nature and the working of the individual as such. Accordingly psychological study is absolutely required in education to help determine its ethical import and conduct in two specific directions. (1) In the first place, all conduct springs ultimately and radically out of native instincts and impulses. We must know what these instincts and impulses are, and what they are at each particular stage of the child's development, in order to know what to appeal to and what to build upon. Neglect of this principle may give a mechanical imitation of moral conduct, but the imitation will be ethically dead because it is external and has its center without not within the individual. We must study the child, in other words, to

get our indications, our symptoms, our suggestions. The more or less spontaneous acts of the child are not to be thought of as giving moral forms to which the efforts of the educator must conform—this would result simply in spoiling the child, but they are to be thought of as symptoms which require to be interpreted; as stimuli which need to be manifested in directed ways, as material which, in however transformed a shape, is the only ultimate constituent of future moral conduct and character.

(2) Our ethical principles need also to be stated in psychological terms because the child supplies us with the only means or instruments at command with which moral ideals are to be realized. The subject-matter of the curriculum, however important, however judiciously selected, is empty of conclusive moral content until it is made over into terms of the individual's own activities, habits, and desires. We must know what history, geography and mathematics mean in psychological terms, that is, as modes of personal experiencing, before we can get out of them their moral potentialities.

The psychological side of education sums itself up, of course, in a consideration of the nature of character, and of how character best grows. Some of the abstractness of the previous discussion may be relieved, if not removed, if we state it with reference to character.

It is a commonplace to say that this development of character is the ultimate end of all school work. The difficulty lies in the execution of this idea. And an underlying difficulty in this execution is the lack of any conception of what character means. This may seem an extreme and uncalled-for statement. If so, the idea may be better conveyed by saying that we conceive of character simply in terms of results; that we have no clear conception of it in psychological terms—that is, as a process, as working or dynamic. We know what character means in terms of the kinds of actions which proceed from character, but we have not a definite conception of it on its inner side, as a piece of running, psychical machinery.

I propose, then, to give a brief statement of the nature of character from this point of view. In general, character means power of social agency, organized capacity of social functioning. It means, as already suggested, social insight or intelligence, social executive power, and social interest or responsiveness. Stated in psychological terms, it means that there must be a training of the primary impulses and instincts, which organize them into habits which are reliable means of action.

- (1) Force, efficiency in execution, or overt action, is the necessary constituent of character. In our moral books and lectures we may lay all the stress upon good intentions, etc. But we know practically that the kind of character we hope to build up through our education is one which not only has good intentions, but which insists upon carrying them out. Any other character is wishy-washy; it is goody, not good. The individual must have the power to stand up and count for something in the actual conflicts of life. He must have initiative, insistence, persistence, courage and industry. He must, in a word, have all that goes under a term, "force of character." Undoubtedly, individuals differ greatly in their native endowment in this respect. None the less, each has a certain primary equipment of impulse, of tendency forward, of innate urgency to do. The problem of education on this side is that of discovering what this native fund of power is, and then of utilizing it in such a way (affording conditions which both stimulate and control) as to organize it into definite conserved modes of actionhabits.
- (2) But something more is required than sheer force. Sheer force may be brutal; it may override the interests of others. Even when aiming at right ends it may go at them in such a way as to violate the rights of others. More than this, in sheer force there is no guarantee for the right end itself. It may be directed towards mistaken ends, and result in positive mischief and destruction. Power, as already suggested, must be directed. It must be organized along certain channels of output or expression in such a way as to be attached to the valuable ends.

This involves training on both the intellectual and emotional side. On the intellectual side we must have judgment—what is ordinanly called good sense. The difference between mere knowledge, or information, and judgment is that the former is simply held, not used; judgment is ideas directed with reference to the accomplishment of ends. Good judgment is a sense of respective or proportionate values. The one who has judgment is the one who has ability to size up a situation. He is the one who can grasp the scene or situation before him, ignoring what is irrelevant, or what for the time being is unimportant, and can seize upon the factors which demand attention, and grade them according to their respective claims. Mere knowledge of what the right is in the abstract, mere intentions of following the right in general, however praiseworthy in themselves, are never a substitute for this power of trained judgment. Action is

always in the concrete. It is definite and individualized. Except, therefore, as it is backed and controlled by a knowledge of the actual concrete factors in the situation demanding action, it must be relatively futile and waste.

(3) But the consciousness of end must be more than merely intellectual. We can imagine a person with most excellent judgment, who yet does not act upon his judgment. There must not only be force to insure effort in execution against obstacles, but there must also be a delicate personal responsiveness—there must be an emotional reaction. Indeed good judgment is impossible without this susceptibility. Unless there is a prompt and almost instinctive sensitiveness to the conditions about one, to the ends and interests of others, the intellectual side of judgment will not have its proper material to work upon. Just as the material of objects of knowledge is related to the senses, so the material of ethical knowledge is related to emotional responsiveness. It is difficult to put this quality into words, but we all know the difference between the character which is somewhat ihard and formal, and that which is sympathetic, flexible, and open. In the abstract the former may be as sincerely devoted to moral ideas as the latter, but as a practical matter we prefer to live with the latter, and we count upon it to accomplish more in the end by tact, by instinctive recognition of the claims of others, by skill in adjusting, than the former can accomplish by mere attachment to rules and principles which are intellectually justified.

We get here, then, the ethical standard upon the psychological side, by which to test the work of the school. (a) Does the school as a system, at present, attach sufficient importance to the spontaneous instancts and impulses? Does it afford sufficient opportunity for these to assert themselves and work out their own results? Omitting quantitative considerations, can we even say that the school in principle attaches itself, at present, to the active constructive powers rather than to processes of absorption and learning, acquiring information? Does not our talk about self-activity largely render itself meaningless because the self-activity we have in mind is purely intellectual, out of relation to the impulses of the child which work through hand and eye?

Just in so far as the present school methods fail to meet the test of these questions we must not be surprised if the ethical results attained are unsatisfactory. We cannot secure the development of positive force of character unless we are willing to pay the price psychologically required. We cannot smother and repress the child's powers, or gradually abort them (from failure to permit sufficient opportunity for exercise), and then expect to get a character with initiative and consecutive industry. I am aware of the importance attaching to inhibition, but mere inhibition is valueless. The only restraint, the only holding-in that is of any worth is that which comes through holding all the powers concentrated in devotion to a positive end. The end cannot be attained excepting as the instinct and impulses are kept from discharging at random and from running off on side tracks. In keeping the powers at work upon their relevant ends, there is sufficient opportunity for genuine inhibition. To say that inhibition is higher than power of direction, morally, is like saying that death is worth more than life, negation worth more than affirmation, sacrifice worth more than service. Morally educative inhibition is one of the factors of the power of direction.

(b) We must also test our school work as to whether it affords the conditions psychologically necessary for the formation of good judgment. Judgment as the sense of relative values involves ability to select, to discriminate, by reference to a standard. Acquiring information can therefore never develop the power of judgment. Whatever development the child gets is in spite of, not because of, those methods of instruction which emphasize simple learning. The test comes only when the information acquired has to be put to use. Will it do what we expect of it? I have heard an educator of large experience say that in her judgment the greatest defect of instruction today, on the intellectual side, is found in the fact that children leave school without a mental perspective. Facts seem to them all of the same importance. There is no foreground nor background. There is no instinctive habit of sorting out our facts upon any scale of worth, and of grading them accordingly. This may be an exaggerated statement, but in so far as there is any truth in it, it points to moral evils as serious as the intellectual ones.

The child cannot get power of judgment excepting as he is continually exercised in forming and testing judgment. He must have an opportuity to select for himself, and then to attempt to put his own selections into execution that he may submit them to the only final test, that of action. Only thus can he learn to discriminate that which promises success from that which promises failure; only thus can he form the habit of continually relating his otherwise isolated ideas to the conditions which determine their value. Does the school, as a system, afford, at present, sufficient opportunity for this sort of experimentation? Excepting in so far as the emphasis of the school work is upon the doing side, upon construction, upon active investigation, it cannot meet the psychological conditions necessary for the judgment which is an integral factor of good character.

(c) I shall be brief with respect to the other point, the need of susceptibility and responsiveness. The informal, social side of education, the æsthetic environment and influences, are all-important here. In so far as all the work is laid out in regular and formulated ways, in so far as there are lacking opportunities for casual and free social intercourse between the pupils, and between the pupils and the teacher, this side of the child's nature is either being starved or else left to find haphazard expression along more or less secret channels. When the school system under plea of the practical (meaning by the practical the narrowly utilitarian) confines the child to the three R's and the formal studies connected with them, and shuts him out from the vital sources of literature and history, and deprives him of his right to contact with what is best in architecture, music, sculpture and picture, it is hopeless to expect any definite results with respect to the training of this integral element in character.

What we need in education more than anything else is a genuine, not merely nominal faith in the existence of moral principles which are capable of effective application. We believe that, so far as the mass of children are concerned, if we keep at them long enough we can teach reading and writing and figuring. We are practically, even if unconsciously, skeptical as to the possibility of anything like the same sort of assurance on the moral side. We believe in moral laws and rules, to be sure, but they are in the air. They are something set off by themselves. They are so very "moral" that there is no working contact between them and the average affairs of everyday life. What we need is to have these moral principles brought down to the ground through their statement in social and in psychological terms. We need to see that moral principles are not arbitrary, that they are not merely transcendental; that the term "moral" does not designate a special region or portion of life. We need to translate the moral into the actual conditions and working forces of our community life, and

into the impulses and habits which make up the doing of the individ-

All the rest is mint, anise, and cummin. The one thing needful is that we recognize that moral principles are real in the same sense in which other forces are real; that they are inherent in community life, and in the running machinery of the individual. If we can secure a genuine faith in this fact, we shall have secured the only condition which is finally necessary in order to get from our educational system all the effectiveness there is in it. The teacher who operates in this faith will find every subject, every method of instruction, every incident of school life pregnant with ethical life.

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THESES.

Moral life in school involves the same principles as moral life outside the school. Ethical theory is two-faced, psychological and social; the psychological has to do with the agent and how he operates as an individual; the social with what he does in his relation to the social whole.

This social relation of a child is frequently taken in too limited a sense, as when training to citizenship in the narrow sense is in mind. The child must be considered as a member of society in the broadest sense. Apart from the thought of participation in social life the school has no end nor aim.

The school must be made a vital social institution to a very much greater extent than obtains at present.

The common separation between intellectual and moral training is one expression of the failure to construct the school as a social institution.

Excepting in so far as the school is an embryonic yet typical community life, moral training must be partly pathological, partly formal.

The extent and way in which a study brings a pupil to consciousness of his social environment, and confers upon him the ability to interpret his own powers from the standpoint of their possibilities in social use, is the ultimate and unified standard, the criterion of the value of studies.

Form represents the technique, the adjustment of means involved in social action, just as content refers to the realized value or end of social action. The social stand-point in geography, history, literature, and mathematics.

Ultimate moral motives and forces are nothing more nor less than social intelligence, the power of observing and comprehending social situations—and social power—trained capacities of control—at work in the service of social interest and sime.

The moral trinity of the school. The demand is for social intelligence, social power, and social interests. Our resources are: (1) the life of the school as a social institution in itself, (2) methods of learning and of doing work, (3) the school studies or curriculum.

Psychological study is necessary in education to help determine its ethical import and conduct (1) because all conduct springs out of native instincts and impulses; (2) ethical principles need to be stated in psychological terms because the child supplies us with the only means or instruments with which moral ideals are to be realized.

Character means power of social agency, organized capacity for social functioning. It means social insight, social executive power, and social responsiveness.

Test the school upon these three requirements.

What we need in education more than anything else is a genuine, not merely nominal, faith in the existence of moral principles capable of effective application.

[Outline by the Editor.]

SOCIAL ASPECTS OF MORAL EDUCATION.

BY CHARLES DE GARMO, PHD., President of Swarthmore College, Swarthmore, Pa.

In a democratic age and country the natural tendency is to exalt the importance of the individual. One may even declare that this is an babitual mode of thought with democratic peoples. This natural tendency is still further emphasized by our recent methods of child study, whereby the eyes of teachers are turned to individual peculiarities of body and mind. Without doubt this tendency will be wholly beneficial provided we hold steadily before ourselves the true ends for which the individualization is made. To see the social aspects of moral training we need to distinguish somewhat sharply between two types of individuality, which I call the social and the non-social.

TYPES OF NON-SOCIAL INDIVIDUALITY.

A non-social individual is one that is, on the one hand, so absorbed in his subjective self that he is prone to overlook a large part of his duties to others and, on the other, to miss many of the best things of life, because he does not appreciate the opportunities that cooperation opens to him. There are several types of this form of non-social individuality. One is the emotional type, in which feeling is so exalted as to lose its connection with insight and action; the self is submerged in emotion. Another is the æsthetic type, in which beauty of form, harmony of color, concord of sound, self-poise of conduct, count for more than those forms of thought and action that make for efficiency in the accomplishment of actual work. Still another type of the nonsocial individual is seen in the man whose intellectual effort ends with analysis. Such a man is the logician, the man of introspective insight, the man whose mind has plenty of light, but no heat. In the popular imagination the college graduate is often pictured as such a character. This is also a common view of what a philosopher is; namely, a man who can make a thought-analysis of the cosmos, but who cannot manage with efficiency even the minor details of his own physical surroundings. Still another type of non-social individuality is seen in the man of strong, resolute action, such as the pioneer must be, who takes his fortune and his life in his hand, and who, plunging into the wilderness, tries to promote the one and to preserve the other by means of his axe and his rifle. He is the man who has no neighbors, whose life is lived out in solitary communion with nature. These types are all non-social because they make little or nothing of cooperation among men for the accomplishment of ends desired by all.

In the moral world he is the non-social individual who emphasizes but little, or in only a few directions, ethical relations to his fellows. Thus, for instance, one man may feel he has done his whole duty to society when he has subscribed a given amount to public or private charities; another when he has paid his assessments for the maintenance of the church; another when his heart is overflowing with good will for his neighbors to the extent of allowing them to do what they have a mind to, provided they do not hinder him in his enterprises; another thinks he has fulfilled his whole social function when he votes on election day, or when for a price he helps consume the things provided at a church sociable, or when he pays his taxes. Others conceive that they have kept the whole moral law when they have observed the negative commandments.

EUROPEAN INFLUENCES PRODUCING NON-SOCIAL TYPES OF CHARACTER.

There are many historical reasons, besides the natural democratic tendencies of the age, that explain why our current educational theories concerning the individual are so largely non-social in character. As we know, during the Middle Ages, social organization was confined to a few broad lines, which though at first the means for promoting and preserving liberty, finally became the means for destroying it. Thus, in the religious and political realm, the church had become supreme, and had presumed to relieve men of the necessity of thinking. The natural rights of a man to his own thoughts and the freedom of expressing them were destroyed, the attempt being made to regulate the spiritual life of mankind by the authority of the church. In the economic life the feudal system, with its robber barons controlling the land, and its accompanying vassalage of the lower classes, became, through the rise of cities and the general growth of industrial life, a source of the greatest tyranny, though at first it was a condition of survival for the lower classes. Absolute monarchy, which in the earlier,

more military phases of national life was a condition for the survival of the nation, became afterwards a keenly felt oppression. It is not strange, therefore, that with the revival of learning men should strive to emancipate themselves from the rule of spiritual authority, from the economic slavery of the feudal system, and from the caprices of absolutism.

The collision between the new spirit of independence and the old tyrannical institutions occurred at many points, as, for instance, in the Reformation and the wars that followed it; in the Puritan Revolution in England, and the French Revolution in France.

It is not strange, moreover, that this new movement should become embodied in the theories of the seventeenth and the eighteenth centuries. These are well represented by the doctrines of Hobbes, of Mandeville, and of Rousseau. Hobbes declared: (1) that man is by nature selfish, and non-social, (2) that for the sake of preserving his life and property he must give up some of his non-social rights and instincts, and (3) that the law as promulgated by the sovereign is the rule that must regulate his social conduct. This philosophy broke down in practice with the death of Charles the First. Mandeville, the precursor of Adam Smith, declared, first of all, with Hobbes, that man is by nature selfish and non-social, but (2) that the welfare of society depends upon the activity of the struggle among individuals to accomplish selfish ends. (3) That is therefore the most perfect society in which each individual strives the hardest to attain his selfish ends. This doctrine is the forerunner of the theory of supply and demand, and free competition in the economic world. Rousseau, the philosopher of the French Revolution, declared, first of all, that, contrary to the opinion of Hobbes and Mandeville, man is good and social by nature, but (2) that he has been perverted by history, his social nature being warped and destroyed. and that (3) society must first destroy itself in order to reconstruct itself in accordance with the primitive social nature of man.

AMERICAN REALIZATION OF EUROPEAN NON-SOCIAL IDEALS.

"All is good," declares Rousseau, in the *Émile*, "as it comes from the hand of the Creator; everything is perverted in the hands of man. Let us, therefore, live alone; let the boy and the girl be brought up by themselves, wholly isolated from society, which in all its influences is deteriorating."

It was impossible to realize in Europe this demand of eighteenth-

century philosophy, but its realization became a necessity in the new world. In Europe men could not live alone; in America they were compelled to do so We shall find, therefore, in the pioneer history of our country an accentuation of all those influences of the old world that led toward social disintegration. The strong natural desire for adventure, and the natural longing to exploit the possibilities of wealth opened by the discovery of a new continent, were greatly emphasized by the European conflicts of which mention has been made Both religious and political influences in England tended toward the exodus to this country of the strong individuals who had revolted against the systems of political and religious authority in that land. Thus there came to our shores the Puritan, the Quaker, the nonconformist in general, the political offender, and the man of strong individualistic, democratic tendencies. It was quite out of the question to establish in the wilderness the social system of the highly developed European state. The pioneers scattered through the forests and over the plains, dwelling together in small communities only where it was necessary to secure themselves against the incursions of the Indians. In this life of isolation every type of non-social individuality found a fertile soil. The morose could remain by themselves, the man of individual opinions always found a scope for them, the recluse need not be disturbed by his neighbors, the man of strong will and independent daring could dwell alone in the virgin forests in his bark but or his log cabin. Professor Turner, of the University of Wisconsin. has pointed out to us how for four hundred years these primitive nonsocial tendencies have been perpetuated through the influence of the constantly extending and widening frontier.' He has shown that in our history, both in civic and economic respects, our prevailing ideals of character have been determined vastly more by the energetic frontier than by the far more distant European civilization, which only in recent years has begun to have a powerful effect upon American ideals.

Taking into consideration the influence of these historic forces it is not strange that at the close of the nineteenth century, when the conditions of material, intellectual, social and political life have vastly changed, our doctrines of education should still be permeated by the spirit of the eighteenth century. The philosophy of Rousseau, of Mandeville, and to some extent of Hobbes still dominates American

⁴ F. J. TURNER, "The Significance of the Frontier in American History," Annua. Report of American Historical Association, 1893, pp. 199-227.

ideals of education. There has come to be, therefore, a sharp antithesis between the conditions of life as they now exist, and the non-social theories of individuality, which have by the exigencies of pioneer development been perpetuated to this day. It is, therefore, necessary for the teacher to take a survey of the real situation, in order to see where we are, both in fact and theory, and if possible to bring fact and theory again into concord.

THE PRESENT SITUATION ARISING FROM THE DISAPPEARANCE OF THE FRONTIER AND FROM THE GROWTH OF CITIES.

When we attempt to study our present situation, two important facts come at once to view. The first is, that there is no longer in America a true frontier. The last of our public lands available for agriculture have been taken up. The career of the huntsman is found only in the pages of literature, that of the herder has become a steady occupation in a few portions of the country, while robber farming is rapidly ceasing to be profitable. The other fact of momentous importance is the enormous growth of urban life. Our statistics show that. taking the country as a whole, nearly one-third of our people now live in cities having a population of more than eight thousand. If we take the country east of the Allegheny Mountains we shall find that fully half of the people in that section live in cities or their suburbs. The whole country is a network of railroads and trolley lines, binding all together into a cooperative whole. Even in the Mississippi valley there is a constant exodus from the country to the city, where most of the leaders of thought are to be found. Every village that is supplied with coal and water, and one or more of the raw materials for manufacture, has its tall chimneys and its regulated hours of labor. A whole set of new problems has arisen, quite insoluble under our old conditions of nonsocial life. In the early days every running stream furnished an abundant supply of pure water, or, lacking this, the pioneer could strike a crystal fount by digging a hole in the ground. Now almost every running stream is polluted with filth, and the well is more frequently a sink of corruption than a fountain of living water. Evidently only cooperation on a large scale can keep our urban communities supplied with pure water. A coordinate problem is that of draining these cities so as to preserve health and to avoid the contamination of the water sources. Beyond this, where large bodies of people live close together the earth itself is no longer a fit medium for moving about from place

to place. The streets must be paved. The light of the stars and of the moon at night no longer suffices for the needs of men. The free, independent life of the frontier can no longer exist for the unfortunate or the indolent in the cities. The problem of the slums arises. The highway is no longer a free way, but certain groups of men must be entrusted with the rights of common carrier, else the railroad and the trolley line are no longer possibilities. All these vast enterprises of water supply, drainage, paving, light, the control of the slums, transportation, must either be undertaken by the community, acting in its corporate capacity, or must be granted in the form of franchises to private corporations. There thus arises the opportunity for robbing the community to satisfy the greed of corporations and politicians. It is said that in the city of Chicago more money is realized from the tax on dogs than from that on street railways.

It is evident that a new type of citizenship is needed to deal with all these problems. The non-social aspect of character is perhaps natural under pioneer conditions where each may do substantially as he pleases without seriously interfering with his neighbor, but in a highly developed state of civilization these forms of independence, which in a new country are right and beneficial, become a source of infinite corruption, and of vast personal hardship to the individual. Here again we see the need for a readjustment of our theory and practice in education to our new social and economic conditions.

We need, perhaps, first of all, to get a somewhat adequate ideal of what constitutes a character that is truly moral from the social standpoint. If, on the one hand, the non-social individual is defined as one who is so absorbed in his subjective self that he is prone to overlook both his duties and his opportunities, we may perhaps define a social individual as one who is constantly alive to all his duties toward his fellows, and keenly sensible of the social advantages that come to every man through the development of the cooperative spirit.

SOCIAL VJ. SOCIALISTIC CONCEPTIONS.

At this point we may well distinguish between a social and a socialistic organization of society. Nearly all socialistic schemes have this characteristic in common, that they would reproduce in the industrial world and for industrial purposes the same type of social institution that we see in the ancient world in the domains of religion.

and the state.' They would prevent any man from suffering hunger, by putting the industrial activity of every man under state surveillance. Their organizations are always vast, unwieldy, and highly mechanical - witness Bellamy's multary state. The day is long since past when such organizations of society are necessary for its survival or for the survival of the individual. They belong to the type of society where the presence of external dangers, either of warlike incursion or of famine, compelled men to give up most of the things which, next to bare existence, they chiefly desired. It is highly improbable that the human race, after outgrowing these primitive forms and becoming so highly civilized and so firmly Christianized that the most serious of the dangers which formerly produced these organizations no longer exist, will be content of their own free volition to return to those forms of social organization that in the end have proved the greatest obstacles to liberty and progress. If this is true even among the warlike nations of Europe, how much truer must it ever remain in a powerful, yet isolated nation like our own.

A true social organization, on the other hand, permitting the agencies of production to remain in private hands, and eschewing all artificial schemes of distribution, is marked by its freedom of association, by its permission of individual initiative in every department of life, and by its division of authority between large and small bodies. It is permeated by the Anglo-Saxon idea of local control of local affairs. We have, it is true, a great nation, which is a powerful unit, but we have, on the other hand, our local political organizations, which in the affairs that concern them chiefly are practically autonomous. So in all the great organizations of religious life. We are a Christian people, but we are divided into many denominations, and each denomination is separated into its own self-governing churches. All the business of the country is managed more and more in the same way. We have great accumulations of capital, controlled as to its general policy by corporations, but managed in its details by small groups of men. Every city has the possibility of perfect elasticity in the management of its affairs. If one group proves recreant to its trust, another composed of honest men can be substituted in its stead. Instead of one

² What is characteristic of socialism is the joint ownership by all the members of the community of the instrument and means of production, which carries with it the consequence that the division of the produce among the body of owners must be a public act according to rules laid down by the community."—J. S. Mill., Socialism.

vast, dead, immovable organization, that can be changed only by revolution, we have an elastic system, sensitive to every determined phase of popular opinion, and changeable without violent outbreaks at any time or in any place. We have, in short, a system that is undergoing constant evolution. This is what I call a social as opposed to a social-istic organization of the various activities of men.

FUNDAMENTAL DIFFERENCES BETWEEN SOCIAL AND NON-SOCIAL TYPES OF CHARACTER.

It is necessary to make a somewhat more fundamental analysis of the differences to be observed in the two types of character, the social and the non-social. As has already been intimated, the non-social individual centers all his thoughts and activity in himself. He contracts his individuality. The social individual, on the contrary, expands his personality. Professor James, in his chapter on "The Self" has well described these two types: "All narrow people," he says, "intrench their me. They retract it from the region of what they cannot securely possess. People who don't resemble them, or who treat them with indifference, people over whom they gain no influence, are people on whose existence, however mentorious it may intrinsically be, they look with chill negation, if not with positive hate. Who will not be mine, I will exclude from existence altogether -that is, as far as I can make it so - such people shall be made as if they were not. Thus may a certain absoluteness and definiteness in the outline of my me, console me for the smallness of its content. Sympathetic people, on the contrary, proceed by the entirely opposite way of expansion and inclusion."

Readiness to participate in group activity is an index of the social character, whereas the inclination to avoid such participation by centering all activity in the self, or what the self can actually dominate, is the characteristic of the non-social individual. An illustration of this difference may be seen in the differing conceptions that people have of what constitutes a neighbor. Remembering that in answer to the question of the lawyer, "Who is my neighbor?" Jesus replied with the parable of the Good Samaritan, many have restricted the idea of neighborliness to that of benevolence. He is considered a true neighbor who would rescue the perishing, who would nourish the wounded, who would give of his substance to others less fortunate than himself.

JAMES, Psychology, p. 189.

However self-centered a man may be with respect to cooperation with others in group activities for common ends, he is considered a good neighbor if he has the quality of benevolence toward the unfortunate; but there is another and a better conception of the neighbor, which, including all that the old contains, greatly expands the range of neighborly action. Holding this idea of group activity before us, we can see that not he alone who is willing to give alms is the true neighbor, but he who is willing to work with his fellows in groups for common purposes, for example, to establish and maintain a good school, to protect the sanctity of the home, to have a good water supply and a good drainage system in the city, to have the streets properly lighted and paved, to forbid offensive sights, sounds, and smells in public highways, to protect the interests of the public against rapacious corporations and politicians, and to shut up the evil doer and let the innocent go abroad rather than, as in olden times, to shut up the innocent, such as the women and children and scholars, that the evilminded might walk abroad.' A good neighbor is willing to combine with any group of men to have good roads in the country, to see that the conditions of health everywhere prevail, that churches are supported, that the amenities of social life may prevail in the country as well as in the city, so that the benumbing routine of unvarying drudgery so often found in the country may have its social relief. He is willing to vote with that party, or that section of a party, that insists that not only shall the flag be honored by the children, but that the civic liberties and rights pertaining to it receive due attention; that the community shall no longer be dominated by a boss, because the citizens are too indolent, or too selfish, or too cowardly, or too indifferent, or too much isolated in their feelings, to combine together for good government. Such a man, in brief, is anxious that the affairs of the community, county, state, and nation shall reflect the common honesty, and that they shall be conducted with economy and efficiency for the common good.

Another characteristic of social, as opposed to non-social individuality, which is observed in nations quite as much as in persons, is seen in the fact that the non-social are relatively analytic in their habits of thought and inclined to passivity rather than activity with respect to all the important things that go to make up the life of an individual or

^{*} See PATTEN, "Economics for the Public School," Annals of American Academy of Social and Political Science, January 1895.

of a nation. Readiness of participation in group activity implies a synthetic rather than an analytic phase of character. The one type of character tends towards mere contemplation, as is seen in the man whose instincts are all æsthetic. His self is satisfied in the enjoyment that comes from contemplating the various forms of art. He may indeed reflect upon their meaning, analyzing the motives of a painting or a statue, but his mental activity stops with himself. It is not associated with the arousing of the motor activities, for it does not stimulate him to do anything. In the same way we find the contemplative, analytic type of character in every department of life. We have the man who sits at home to tell how battles are won and lost. The politician who can analyze the condition of the country, but who does nothing to change it; the analytic moralist who can tell precisely what the evils of the liquor traffic are, but whose soul is never animated by an irrepressible desire to do something about it; the man who can analyze the sermon of the preacher, teiling precisely what its content is and what its strong and its weak points are, but who never thinks of attempting to carry its maxims into actual practice. These types are all non-social because they are purely analytic and passive. There is a little flurry of introspective brain activity, but it does not pass over into motor impulse, which is the invariable index of the social or sympathetic character. With the latter, conviction leads to action, and perception of the desirability of doing something leads to the attempt to do it. If one type of character is passive, the other is active; if one is contemplative and analytic, the other is synthetic and executive; if one is self-centered and contracted, the other is cooperative and expanded. Professor Patten says on these points: "Social reasoning depends on the content given to the self. Only as the feeling of identity is expanded can the organism, the material world, society, and the universe become real to men. Should their attitude become strictly skeptical (or non-social) all these would become unreal, trains of sensorial ideas would alone remain. It is the synthetic self that is the basis of society. To the analytic self non-social individualism is the only logical system. It regards the social forces as unreal. The synthetic self is the active self; the analytic self is due to our passive states. 11 z

[&]quot;Relation of Sociology to Psychology," Annals of the American Academy of Political and Social Science, p. 11, Philadelphia. See also for more expanded discussion, "The Theory of Social Forces," by the same author.

Many examples could be cited from history where it is evident that the disintegrating non-social spirit of the people has prevented unity. The Greeks were, as we know, a people who were animated, not only in their daily occupations, but in their religion as well, by the æsthetic ideals, which are essentially non-social in their tendencies, being purely personal and contemplative in character. With them the good man was the sage, because he was the man who had analytic insight enough to distinguish the good from the bad, and who understood that the bad, constantly pursued by an individual, leads to his unhappiness, if not to his ultimate destruction. It was an axiom with them that he who truly knows the good is sure to do it, because otherwise he would have to repudiate his own deepest insight. This is the prevailing theme of the Grecian systems of morality, that of the Cyrenaics no less than of the Cynics. Even Plato resigned the direction of his state to his sages. Greece did indeed develop the subjective individuality of its citizens; it did indeed become great in the products of art, but it did not become great in those forms of industrial and political activity in which the social spirit is an essential element. Small though the country was, it was a series of discordant states, each ready to pounce upon the other with slight provocation. There was no sense of national unity. The Greek language itself, even, did not serve to produce political harmony.

In our own times the German nation furnishes a striking example of the unfortunate results of the non-social spirit. True German unity remained a dream of the philosopher for a thousand years. The country was divided into a countless number of petty principalities, each intent upon preserving its non-social individuality. It took the tremendous upheaval of the Napoleonic wars to crush out enough of these petty powers to make the ultimate union of 1870 possible. It is one of the marvels of history that only toward the close of the nineteenth century has the social spirit become sufficiently dominant in Germany to unite that great people of a common tongue into a nation.

MOTIVES FOR SOCIAL ORGANIZATION.

If we inquire what the motives are that tend toward the growth of social unity and social organization in the varying phases of industrial and of religious national life, we shall find them in large degree in the contrast between what Professor Patten calls a "pain economy" and a

"pleasure" or social economy." There are two classes of interests that stimulate men to social activity, the one negative, the other positive. Under the natural separating tendencies of the primitive environment it is common danger more than anything else that induces men to combine for common purposes. This fact is clearly revealed in the history of the American colonies; each colony jealous of every other, desiring to stand upon its own feet, was induced only by the most alarming dangers of Indian warfare to unite with the others for common defense. We know the history of the colonial times and that of the period after the Revolution. We know the unsuccessful attempt to live under the Articles of Confederation, where mere external union was attempted; we are aware of the conflicting views of the representatives of the colonies in the Constitutional Convention; we are painfully conscious, moreover, of the doctrine of states' rights or state sovereignty, and how it arose, and how it was perpetuated almost to our own day. We cannot forget that it was only the lash of a tremendous civil war, and the growth of a nation outside of the original colonies that have at last brought us to a true national unity. It has been the fear of evil that has brought men together into social organizations in the past. There is, however, another basis for social unity gradually established by progress in civilization, and especially those phases of civilization that enable dense populations to maintain a high standard of life. This basis is not negative, but positive, not the fear of evil, but the opportunity for good. This is the true social spirit. According to this idea men combine for mutual good, and for promoting in positive ways, through group activity, the welfare of the whole. These groups, moreover, are manifold and flexible. Under the old pain economy, the danger of war or the imminence of famine was about the only motive for social cooperation, but under the affirmative social impulse the cooperative groups are as numerous, as flexible, and as changeable as the varying needs of the community. A society is organized for every social, philanthropic, political, economic end seen to be desirable by any given group of people. These social forces come to the front when the country is so advanced in standard of living and density of population that what may be called the pleasure or true social economy is possible. In such communities political or religious despotisms, together with military organizations,

^{2&}quot; The Theory of Social Forces," Annals of the American Academy of Politica.
and Social Science, Philadelphia.

are no longer the conditions of survival. Our nation has no real fear of foreign invasion for two reasons, first, because it is strong enough to repel one should it be made, and, second, because there is no good reason, nor is there likely to be one, why such an invasion should be made. We are absolutely freed from the fear of those evils which made the early forms of institutions so formidable and so destructive to the true interests of men as soon as the danger of subjugation by foreign nations was removed. Being no longer dominated by the fear of evil, we are free to look about us and to enter into every form of social cooperation that promises to enhance our material, our civil, or our spiritual interests.

THREE SOCIAL FUNCTIONS OF THE SCHOOL.

Having come to a definite conclusion as to what the social ideals, as represented in our educational literature, really are, and, on the other hand, what they should be when we take into consideration the natural conditions of social life as they now exist, the important question arises. What can the schools do to develop social as opposed to nonsocial individualism? Taking our analysis as a guide to what is desirable, it would seem that there are three prime requisites for accomplishing this end. They are the formation of right social ideals, the cultivation of adequate social disposition, and the formation of efficient social habits. The intellectual apprehension of the ideal is not sufficient to enable a human being to live up to it. Nor, on the other hand, is a kindly disposition without firm conviction enough to secure the best results; nor are ideal and disposition to conform to it of themselves sufficient. There must be the ingrained habit of moving toward an ideal conceived and desired. Each of these topics requires a much more thorough exposition than the limits of the present article permit.

THE STUDIES AS SOURCES OF SOCIAL IDEALS.

Looking at the question in a broad way, it is upon the school studies that we must to a large degree depend for the revelation of social ideals. Every subject has its social side; each, in other words, has some relation to man and his activities. History records his will in action, literature shows ideally his struggle for and against ethical principles, science furnishes him the means whereby he can advance in civilization, linguistics teaches him how to use his thought most effectively for accomplishing the purposes for which he labors. It was a favorite con-

ception with Herbart that the chief function of instruction is to furnish a moral revelation of the world to the child, but this morality so revealed is necessarily of a social character, for every one of the studies, in so far as it is moral at all in its influence, points to that phase of morality that we call social, for it reveals the actual and the ideal relations between man and man, community and community, nation and nation.

This conception of education is radically different from that which arises from regarding the function of education as the development of the individual in his non-social character. When viewed from this standpoint it is almost inevitable that the studies should be valued largely for their gymnastic worth, rather than for the ideals they contain. Our doctrine of formal discipline, whereby the mind is supposed to be educated by doing work, without much regard to what the thought and meaning of the work are, is the natural consequence of non-social theories of individualism. The function of education, according to this theory, is to drill the mind; but when we view moral education in its social aspects, we see that drilling is not the sole function of education. The standpoint changes, and the individual finds his relation to the rest of the world, instead of trying to subordinate all things to himself. Changing our point of view with respect to the studies from the non-social to the social aspect is almost as radical in its results as was the change adopted by Copernicus when he ceased to think of the earth as the center of the solar system, and regarded the sun as the center. The same elements of the problem were present, but the solution was very different. Whether we adopt the non-social or the social theory of education the same branches of learning are to be considered. but the whole situation is vastly different in the two cases. In the first the studies are material chiefly for drill, with information as a secondary purpose; under the social aspect the studies are regarded primarily as the means for a world-revelation to the child -eine Weltanschauung. as the Germans say.

Each of these studies has its own peculiar function in this ethical revelation, since each contains a different aspect from the others, or else exhibits the same thing from a different standpoint. Geography is, perhaps, the most universal of all elementary studies for giving a child social ideals. It shows him the various forms of government in the world; it informs him to some extent of the principal religions; it enables him to understand the conditions for plant and animal life in

the various parts of the globe and their influence upon the life of man. The study of the climatic conditions in the arctic regions makes it clear why the Esquimaux live as they do; whereas a study of the conditions of life in the torrid zone explains in a large measure the development of uncivilized and of civilized life in the tropics. When we come to the temperate regions, in addition to this study of natural conditions, a detailed examination of the factors of industrial life, such as lumbering, mining, manufacture, farming, transportation, postal and telegraph systems, newspapers, etc., enables the child to grasp in some degree the reasons for the rapid advance in civilization everywhere found in these regions of the globe.

NEED OF HIGHER EDUCATION FOR TEACHERS.

Similar considerations hold for all the departments of instruction. It is very evident that we shall not make a great deal of progress in the development of social ideals unless our teachers and our authors are alive to the need and the opportunity of teaching these ideals through the studies. So long as our teachers have only the inadequate conceptions of the purposes of education that are obtained through elementary training we shall not make a great deal of advance in the development of social ideals. We find here the reason for the utilization of the methods of higher education in the training of teachers. The great temptation in this work is to spend all the time in drilling upon elementary subjects, so that the teacher shall be thoroughly well qualified to do the detailed work in grammar and arithmetic and the other common-school studies. The ultimate results, however, under such a system of training teachers are sure to be disappointing. The teacher, always shortsighted with respect to the function of the school studies, becomes more and more so under the benumbing influence of daily routine with immature minds. We say the teacher dries up, meaning by this that the mind confines itself almost entirely to routine trains of thought. The only hope for the teacher so prepared is subsequent investigation into new realms of study under the leadership of school principals and superintendents who have had the advantages of liberal education. The essential difference between elementary and higher education lies in this, that elementary education deals necessarily with non-related fragments of knowledge, whereas higher education always takes a comparative view of any subject of study. Thus the study of botany is not merely the study of facts regarding plants, but it is, first

of all, a study of the function of the parts of a plant. The whole plant is examined from the standpoint of the leaf, the blossom, the fruit, because every one of these has a vital function in carrying on the life of the whole. Furthermore, the study of the plant leads us at once to the comparative study of the environment of the plant - the air, its moisture and temperature; and the earth, its temperature and chemical qualities. A thorough study of the plant, moreover, involves its relation to its altitude above the ocean and to the latitude in which it grows; its influence upon man, if it has one, is also taken into consideration. This is especially true of all those plants whose products enter into the commerce of the world. Then, from the standpoint of botany, under the methods of higher education, we get a view of physical geography in several of its elements, of chemistry, of physics, of the industrial, and even social life of man. The same is true with every subject. In the history of art we read the history of civilization from the standpoint of the æsthetic. When we study the civil government of the United States we study the history of modern democracy as manifested in our own country. When we study political history we study the development of civilization as revealed in national activities. When we take up political science we make a similar study of the same thing from the standpoint of government. When we take up economics by the comparative methods of higher education we are studying history and religion and politics and education in the light of man's industrial development. Each one of these studies, then, pursued by the methods of higher education, gives a revelation of the chief factors of civilization. We stand on different peaks, but we see the same mountain range. It is not necessary that the teacher should know all these subjects in this way. It is, perhaps, sufficient to know thoroughly one study, or one group of studies, like science, or history, or literature, or linguistics. If the teacher once has the view from any one of these standpoints, it will be possible to utilize the common-school studies for the development of social ideals in the children.

THE DEVELOPMENT OF SOCIAL DISPOSITION.

Intimately associated with the development of ideals is that of the corresponding development of social disposition. Discussion of this topic in Herbart circles always appears under the title of INTEREST. What is the great function of interest in the school? Not amusement, not even the desirable end of claiming the attention of the children

during the recitation, but it is rather the development of an abiding hospitality for those phases of moral conduct that involve the happiness or unhappiness, the welfare or detriment of other members of the social group to which the individual belongs.

Reformers tell us that it does but little good to remonstrate with the inhabitants of the slums for living upon so low a plane. It is not even sufficient to tell them that there are better ways and to demonstrate to them that a higher life is within their reach. A disposition to live in accordance with the new light must in some way be established, else the reformer loses his breath. Even the construction of better buildings with the conveniences of life does not always suffice to effect the purpose desired. It is said that in one row of new tenement houses bath tubs were supplied for all the inhabitants. After a time the inspector found that one man had used his bath tub as a potato bin, another, as a coal bin, another had salted a pig in his. These people had not yet acquired a desire for cleanly bodies; they had not even learned to keep their faces clean. The economist recognizes that desire is the one motive power that will lead men out of their misery. It is not sufficient to inform the intellect that better things are just ahead; there must be implanted in the bosom of the man a desire to reach them. Not only must he have a pious wish for better things, but that desire must pass over into the work he does. Every movement of the spade, every movement of the trowel must be animated by the interest that is transferred from the longed-for end to the means for reaching it. To the teacher the work of the sculptor as he chisels from the shapeless marble the shapely form should be the type of all school activity. The sculptor sees in imagination the perfect statue, and every stroke of the hammer carries with it the force of the ideal. There is no indifference in his work; the interest in the end is transferred to the means for reaching it. The difference between work and drudgery, as Dr. Dewey tells us, hes right here: When the end alone is desired, and the means for reaching it are only a hated routine, then we have drudgery, as in the case of the man who goes mechanically to his day's labor, without interest or pride in its stages, looking only to the reward that is to come at its close. That is drudgery. It is an intolerable thing in the schoolroom. But when the interest in the end is transferred to the means for reaching it, when the end is ever an advancing and broadening and brightening

^{&#}x27;Interest as Related to Will, Dr. John Dewey, Second Supplement to HER-BART YEARBOOK for 1895.

one and each day's labor makes the end of labor more attractive, then we have true work. The chief reason why children are so little interested in the routine of the school is that its revelations of social life are so few and so faint.

We find in this idea of a world-revelation of the ideals of social life the deepest meaning of interest in school studies. There are numerous secondary reasons why children should be interested in their studies that are in themselves perfectly valid, but they are not the most fundamental. A generous mind of the old Greek type, seeing clearly the meaning of civilization and the enormous cost of every advance, would doubtless be fired with the desire not to retard but to further this progress, but the majority of minds are not primarily generous in the sense that the comprehension of a noble ideal is sufficient to inflame the soul with zeal for its preservation and propagation. The acquisition of such a disposition is the work of years. It needs all the noble enthusiasm of the teacher and all the zeal that can come from an early-founded and long-developed interest in the subject-matter of education.

THE DEVELOPMENT OF SOCIAL HABITS.

Not only must the school be a social institution in the development of ideals and the cultivation of hospitality and even enthusiasm for them, but it must be a social institution also in the development of efficient social habits. Some of the most important phases of this side of moral education have been developed by Dr. Harris in the succeeding paper, entitled "The Function of Discipline in Moral Education," in which he shows the significance of cultivating the social habits of regularity, punctuality, silence and industry.

There is also another aspect of school discipline, in the narrower sense of the term, that demands a word of explanation. In the matter of punishments for school offenses the personality of the teacher should remain in the background and the social nature of the school should come to the front. The idea should not be tolerated for a moment that offenses are committed against the teacher; they are not personal but social; they are against the good order and efficiency of the school itself. Every child should see clearly and feel keenly the truth of the social relations. School offenses or offenses against the school as a whole should, so far as possible, meet with social punishments. The objection to corporal punishment lies mainly in the fact that it is for the most part non-social in character. It is likely to be taken individ-

ually, and does not usually affect the pupil's standing in the eyes of his fellows, except perhaps to awaken sympathy for him as against the teacher. Social punishments, however, when made really effective, are usually much more keenly felt than physical ones. A boy will willingly endure almost any amount of physical suffering to make himself a hero in the eyes of his mates, but any diminution of his standing with them is felt more acutely than the sharpest biting of the rod. The boy in school is not far removed in his social feelings from the Indian, who for the sake of appearing heroic before the tribe patiently endures the bitterest physical agony. To be true to its social mission the school must in its punishments adopt the social as opposed to individualistic or non-social principles of government.

THE IMPORTANCE OF MOTOR EFFICIENCY.

The true measure of a social habit is the degree of efficiency with which the student moves to the accomplishment of a social end. The man of affairs is always the man of ready action, both in mind and body. His thoughts are always at command, for he can focus them in an instant in any desired direction. He is always ready, moreover, to exert an amount of motor activity that is sufficient to accomplish the purpose desired; whether this activity is manifested in the word of command, in the written message, or in the use of tools, he can always concentrate the energies of his mind into adequate motor channels. The school cannot be an effective social institution, therefore, that does not in all its activities encourage and develop the mental and motor efficiency of the pupils in its charge. The development of such motor powers is one of the most fundamental reasons for the introduction of manual training, cooking schools, and other forms of industrial activity in our educational system. Another means for the development of motor efficiency is at hand in every school, and yet is usually but feebly utilized, and that refers to the play in which the children find their recreation.

THE SOCIAL FUNCTION OF PLAY.

The kindergartner has learned how to make the early plays of children of great importance in the development of the best type of social character, but the elementary schools, regarding play as something foreign to education, have taken little thought of how the play of the pupils in the primary and grammar schools may be made an

educational instrument for social advance. Play in any form develops motor activity, but it does not necessarily develop the social instincts. It may be so purely individualistic and non-social as rather to retard than advance social ideals. A new element, therefore, a social one, should be introduced into the plays for the schools, and a new thoughtfulness on this subject should be awakened in our teachers. For the most part the plays of children are still essentially in their non-social stage. Boys still play tag and marbles and other individualistic games, where the group idea scarcely appears. At present, however, they are fascinated, both small and great, by the social games of the college, chiefly by football, basketball, and baseball, but they attempt to play these games by professional rules. To the latter there are many objections, the chief of which arise from limitations of number and of space. A small school cannot furnish two nines or two elevens, the members of which are upon an equality in age and strength; nor is it likely, especially in cities, that grounds of regulation size can be provided. Moreover, in a large city school the numbers are so great that most of the pupils must be excluded from the games if professional rules are adhered to. For this class of games teachers need, therefore, to devise new rules for adapting them to smaller or to larger groups and to smaller spaces. Change the rules somewhat and football can be played without special clothing by groups of three, four, five, six, eight, nine, eleven, or more upon a side, and that within contracted grounds. The main point is the equalization of the groups. Effect this result and group games will receive a tremendous impetus. A school in New York has, for example, devised a set of rules whereby thirty or forty boys may play upon a side in the game of football. The changes are chiefly two in character - first, that the ball can be moved from place to place only by punting or passing, never by carrying, and, second, that a touchdown is made only by punting the ball beneath the bar. This plan enables the groups to change from day to day, so that the school may be divided by choosing up, as in some of the older social games. In this form no objection is made by the parents to the game, because undue roughness is eliminated and special clothing is not required. Again, in baseball professional rules are not well adapted to children, for the group character of the play is largely neutralized by the fact that so much depends upon the pitcher. Basketball can be played out of doors in almost any available space; the baskets may be hung on poles, or between poles, or they may be placed upon or in the

ground. These three games, which the schools are borrowing from the college, are merely types of social games which can easily be adapted to the needs of children.

The advantages of group games over individualistic ones are chiefly two—first, a strong individual insists upon being the whole game where it is the individual alone that counts, but in the group game he forgets himself in organizing and directing the group. Alone he can do but little, yet as a group director he may be able to win the game. On the other hand, the weaker boys, who are not allowed to be leaders and who are individually helpless, suddenly become powerful and essential as soon as a group is organized. In this way two of the most important lessons for the future man are learned—group direction and group cooperation. This fact, coupled with the other fact, that motor efficiency is highly developed by games, makes it apparent that play should be much more thoroughly utilized for the social development of children than it has ever been in the past.

VALUE OF THE RECITATION IN DEVELOPING EFFICIENCY.

But one other phase of the development of efficiency need be urged in the present paper. A sharp distinction has already been made between what is called the analytic and the synthetic character. The development of analytic habits of mind without the accompanying development of practical efficiency in the use of the knowledge gained leads on the one hand to the æsthetic type of character and on the other to the analytic; it produces the man who sees clearly enough into moral and other practical relations, but whose mental activity is not accompanied by motor efficiency. One of the chief opportunities of the school to develop what has been called the synthetic man lies in the proper use of the recitation. The mere acquisition of facts does not produce the practical man. Even keen mental analysis is not sufficient. Insight must be accompanied by action; and this action, so far as it is distinct from motor activity proper, such as is seen in manual training, is developed especially in that phase of method which we call application. It is easily appreciated in such studies as grammar and arithmetic and linguistics, but not so clearly in geography and science and history. The acquisition of a grammatical principle is followed by its application in the parsing and analysis of extracts from the literary masterpieces. The comprehension of a principle in mathematics is properly followed by its persistent application to a large

group of problems. This tends to make the mind efficient for the practical application of what it knows; mental alertness is developed, and the capacity to focus knowledge so as to be effective is a continual growth in the pupil. In history this practical application of facts learned will have to do largely with causal relations and with comparisons. The mind is strengthened in its practical capacity by tracing out in detail the causes, for example, that led to Burgoyne's invasion and his ultimate defeat. This practical efficiency is equally promoted by tracing out the effects of the invasion upon subsequent events. The mind is strengthened, furthermore, by the constant drill that leads to organization of knowledge. It is made facile by skillful questioning, that requires the pupil to focus all his resources, now upon this point, now upon that.

When the school has learned to use the subject-matter of instruction for the development of social ideals through a revelation to the child of the essential stages of civilization, when it has awakened a permanent vital interest, a warm hospitality for these ideals, and when it has, through its organization of class, its methods of school discipline, its utilization of play, and its conduct of the recitation, transformed these ideals and interests into habits, then the school has become a social institution.

THESES.

- t. There are two types of individuality, the social and the non-social. Only the former is moral from the social standpoint.
- 2. Non-social individuality, both in theory and practice, was developed in Europe during the seventeenth and eighteenth centuries; it has, on account of peculiar pioneer and frontier conditions, been perpetuated in the United States, at least in theory, until the present time.
- 3. The growth of cities and the disappearance of the frontier have made non-social individualism detrimental to our further progress; non-social should therefore give place to social individualism.
- 4. Social character is shown by its readiness to participate in group activity for the common good, and also by its practical efficiency, both mental and motor, as opposed to esthetic and analytic types of character, which in themselves are essentially non-social.
- 5. The leading motive for group activity has, in the past, been the fear of evil, such as danger from enemies; it must in the future be much more the hope of good, such as the desire for good government, good conditions of health and comfort, good opportunities for economic welfare. In this way negative must give way to positive motives for social cooperation.

- 6. The school must become a social institution, having as its chief functions (I) the unfolding of social ideals, (2) the development of social disposition, and (3) the formation of social habits.
 - (I) Social ideals are to be developed chiefly through the school studies.
- (2) Social disposition must be cultivated through the awakening of an abiding interest in the social ideals.
- (3) Social habits are to be formed by the conduct of the school with respect to regularity, punctuality, silence and industry, also with respect to punishments and to play. The practical efficiency of intellect, so necessary to the social man, is to be developed by rational methods of conducting the recitation.

THE RELATION OF SCHOOL DISCIPLINE TO MORAL EDUCATION.

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There is no topic related to education in the schools that excites so general discussion as that of moral education. And yet there is no topic concerning which the suggestions made are more idle and unprofitable. It is generally assumed that moral instruction is moral philosophy. Now the elementary schools do not attempt with success philosophical instruction of any kind, and in the nature of the case could not give successful lessons in moral philosophy. On this account it has been supposed that there is no moral instruction in the elementary schools. To correct this, suggestions are made on every hand for the preparation of some catechism which should form an introduction to moral philosophy, or more often it is suggested that religious instruction should be introduced for this purpose. Perhaps Bible reading alone without note or comment is proposed as the best means of meeting the want that is felt.

The important question that meets us at this point is, What is the difference between intellectual education and moral education? When we consider its answer we come very soon to the conviction that moral philosophy belongs to intellectual education. For it treats of principles and causes. It belongs to theory, while the moral should relate especially to practice. Moral instruction, strictly speaking, should secure the formation of correct moral habits. The nature of morality is explained in moral philosophy. A correct habit of thinking, a correct view of the world is important enough for moral education, but it does not amount to a moral education, but is only one side of it. One side perhaps leads to the other. Possibly a correct habit of thinking regarding the moral will lead gradually towards the practice of the moral. And certainly a practice of the moral will lead towards a correct thinking as regards the moral.

Again, the more elementary the grade of education the greater the

preponderance of practice over theory. It would seem that the children in the primary schools and the grammar schools should be taught moral practices and habits and that gradually as they go on through the secondary schools and into higher education they should learn the full theory of the ethical.

However this may be, as soon as one approaches the course of education as it is found realized in the existing school systems in America, he comes upon the fact that the matter of moral instruction in the schools belongs to the side known as discipline and not to the side known as instruction in books and theories.

The first thing the child learns when he comes to school is to act according to certain forms—certain forms that are necessary in order to make possible the instruction of the school in classes or groups. The school is a social whole. The pupil must learn to act in such a way as not to interfere with the studies of his fellows. He must act so as to reinforce the action of the other pupils and not embarrass it. This concerted action into which the pupil is trained may be called the rhythm of the school. The child must become rhythmical, must be penetrated by the spirit of the school order. Order is heaven's first law. Everyone has heard this statement quoted again and again. Inasmuch as the future member of the society will have two existences, an individual existence and a social existence, it is well that the school which fits him for life should be a social existence and have these two sides to it.

There are four cardinal rules that relate directly to the school discipline. The child must be regular and punctual, silent and industrious. Let us discuss the necessity of these rules in the school and see the immense importance which school discipline has for the formation of character. "Character," said Novalis, "is the completely rounded will." The human will has acted upon itself and made grooves or ruts in which it may act with efficiency and without contradicting and embarrassing itself. The will in the case of moral action is directed upon itself, the will controls itself. Self-control in the interest of performing reasonable deeds and in aiding all one's fellow men to perform reasonable deeds—this self-control is the essence of the moral.

The commencement of this subjugation of the will on the part of the child is accomplished through the principle of regularity. The child must come regularly to school day by day, must not omit a single session. He must study his lessons regularly, prepare himself for the tasks of the day without omitting any. Recitations or lessons must be attended regularly. Any tendency to yield to the feeling of the moment, any fits of indolence, any indisposition which offers itself must be inhibited by the child's will. He must vanquish his natural like or dislike and perform the reasonable task. He must sacrifice himself whenever necessary. The principle of self-sacrifice is another name for this will training which belongs to moral instruction. To theorize about self-sacrifice and self-control and habits of regularity is intellectual education, but not moral education.

The habit of regularity once confirmed, the pupil has attained some power of directing the action of his will upon his will. He has to that extent taken his will from its subjection to feeling or passion or mere unconscious habit. He does not will upon impulse, but wills rationally.

Not only regularity, but punctuality, is insisted on in the school. He must not merely attend the school, but he must attend it just at the time prescribed, say at the beginning of the morning and afternoon sessions. He must not be content with getting his lesson at some time in the day, but he must get the lesson at the proper time. He must be at the class at the proper time. He must be obedient to the word of command.

In order that there may be concerted action both regularity and punctuality are necessary. The rhythm of action by which the community of individuals is converted into an organic social whole requires punctuality as much as regularity. Without punctuality each individual is in the way of every other one and an obstacle or stumbling block. There can be no movement of the whole as a whole without punctuality. This rhythm is necessary in order that there may be unity of human action. A prescribed order issues forth from the will of established authority. This prescribed order is carried out by individuals acting as a higher individual, namely, as an institution. For an institution is an individuality given to many. It is a unity of effort, an e pluribus unum. The school is to be taught in classes. In the class the pupil learns much more than he could learn by himself. If the teacher should devote himself to one person he could not instruct him in so efficient a manner as he could instruct twenty persons at the same time. For in class recitation each pupil learns more from his fellow pupils (from all their mistakes and failures as well as from their brilliant achievements) than he does from his teacher. Each

pupil is more or less one-sided in his mind. It is, in fact, the object of education to bring out all sides of his mind so that each faculty may be reinforced by all the others. The pupil in learning his lesson understands some phases of it and fails to see what is essential in others, but the failures are not all alike; a given pupil fails in one thing and succeeds in another: his fellow pupil succeeds where he fails and fails where he succeeds. In the recitation each pupil is surprised to find that some of his fellows are more successful than himself in seeing the true significance. The pupil can, through the properly conducted recitation, seize the subject of his lesson through many minds. He learns to add to his power of insight the various insights of his fellow pupils. The skillful teacher knows his power of teaching by means of a class-knows that he can make each pupil understand much more through the aid of a class than he could make him understand if he were to attempt to do all of the explaining for an isolated pupil.

The class recitation is made possible only by regularity and punctuality. The efficiency of the school depends upon it. In the industrial civilization in which we live the same necessity, exists for these school virtues. Unless there is regularity the mill cannot manufacture and the shop cannot go on; there can be no combination between the mechanics who work on a joint enterprise. The engineer or the fireman without this virtue of punctuality would endanger the lives of his fellow workmen by an explosion of the steam boiler, or bring the machinery to a stop through the neglect of its fires.

We are pushing forward in our time into an era of the use of machinery, not merely in manufacturing and transportation, but for all the multifarious uses of the household and the daily life. Man is conquering nature by means of machinery, and the citizen cannot enter into the fruits of this victory unless he adapts himself, through regularity and punctuality, to the demands of this new form of civilization.

But regularity and punctuality are not the only schoolroom virtues. I have mentioned two others, silence and industry. Regularity and punctuality are in a certain sense negative virtues. Silence also belongs to this class, while industry belongs to the positive virtues. Silence is another virtue that depends upon inhibition—upon the inhibitory act of the will. The will acts to repress its self-activity; to guide its own utterance and to limit that utterance to the chosen province prescribed

for it. It is especially a virtue that makes possible the combination of the individual with the social whole. The pupil that whispers or in any way attracts the attention of his fellows not only does something to make his own school time of no account, but he also does much to destroy the time and profit of his fellow pupils and the teacher. We shall see, further on, that even if the pupil converses with his fellow pupils by whispering for good purposes—endeavoring by that means to get information about his lesson or to give information about it—he does so much to destroy the efficiency of his own or of his fellows' work so far as silent preparation is concerned.

If it is true, as scientific men tell us, that man has descended from the anthropoid apes, we can see more clearly the significance of this moral training which suppresses the tendency to prate and chatter. The mere instruct for expression of the half-cultured child is to utter what comes first to his mind. He pours out his impressions before he has allowed them to ripen by reflection. If he can repress the utterance of one thought until he can add another and another and another to it he can deepen his power of thought, whereas if he utters the thought carelessly as it arises in his mind it passes away from him and he does not make a synthetic thought by adding to the immediate impression all other thoughts that relate to it. This is the deep significance of the school virtue of silence. It makes accessible the depths of thought and reflection. It makes possible the individual industry of each and every pupil associated in the school. Each one can detach his industry from the industry of the whole and pursue original study and investigation by himself although surrounded by a multitude. This individual industry is prevented by anything on the part of his fellows which tends to distract him.

The fourth virtue that has been named is industry. Industry may be of various kinds, but the industry of the school is essentially study of the book. The pupil is to add to his own feeble and undeveloped powers of thought and observation these faculties as exhibited in the strongest of his race. The printed page is the chief means by which he adds to his own observation and reflection what has been observed and thought by men specially gifted in these things. The pupil shall learn by mastering his text-book how to master all books—how to use that greatest of all instruments of culture, the library. He shall emancipate himself by this means from mere oral instruction. In the case of oral instruction the pupil must wait upon the leisure of

the teacher, trusting to his memory or writing down the words and pondering them on some future occasion. In the presence of the book he can take the sentences one by one and reflect carefully upon the meaning of each word and each sentence. The book waits upon his leisure. The book contains the most systematic presentation of its author's ideas. Through the book the observers and thinkers of the past become present. Those of distant and inaccessible countries come to his side. This shows us the significance of the kind of labor which the pupil performs in his school industry.

I can describe the nature of the schoolroom industry best by explaining the two kinds of attention which the pupil must cultivate and exercise in the schoolroom. There is, first, the attention which the class must give collectively to the recitation and to the teacher who conducts it, and there is, second, the individual industry of the pupil working by himself. I have already mentioned some of the advantages of the class recitation in discussing the elementary virtues of regularity and punctuality. But it is in the development of these two kinds of attention that the chief value of the class recitation consists. In the recitation, as it is called by us in America (or in the lesson, as it is called by English educators), the teacher examines the work of his pupils, criticises it, and discusses its methods and results. The pupils in the class all give attention to the questions of the teacher and to the answers of their fellow pupils. Each one, as I have already described, learns both positive and negative things regarding the results of his own studies of the lesson. He finds some of his fellow pupils less able than himself to grasp certain points in the subject of study. He finds others who are more able than himself, pupils who have seen farther than himself and developed new phases that had escaped his attention. He is surprised, too, at sides and points of view which the teacher has pointed out; items of information or critical points of view that had escaped his own attention and the attention of his fellow pupils in the class. The pupil gains an insight into human nature such as he never had before. He sees the weaknesses and the strength of his fellows; he sees the superiority manifested by the teacher, who is maturer than he, and who has reinforced his own observation and insight by the observation and insight of observers and thinkers as recorded in books. He measures himself by these standards and comes to that most important of all knowledge, self-knowledge.

This kind of attention which he exercises in lessons or class

exercises is a kind of attention which may be called critical alertness directed outward to the expressions of other minds, namely, of his fellow pupils and teacher. Step by step he watches carefully the unfolding of the lesson, comparing what is said with what he has already learned by his own effort. After the recitation is over he takes up the work of individual preparation of another lesson, but he has improved in some respect his method, because he is now alert in some new direction. He has an intellectual curiosity in some new field that he had not before observed; what the teacher has said or what some bright pupil has said gives him a hint of a new line of inquiry which he ought to have carried on in his mind when he was preparing his lesson of the day before. Now he is consciously alert in this new direction and he reaps a harvest of new ideas that would have been passed over in neglect had he not received the benefits of the kind of attention which I call "critical alertness" in the work of recitation or lesson.

This kind of attention is something that cannot be developed by the pupil in any other way so well as in that school invention called the "recitation" or "lesson."

Let us now consider the other kind of attention which the pupil cultivates and exercises in school. While pupils of one class are reciting the pupils of the other class are preparing their lesson. Each individual is or should be absorbed in the work of preparation, not jointly with his fellows, questioning them or answering them, but by absorption on the part of each in his own work without reference to the other pupils in the room or the teacher; each one must be able to study his own book and resist the tendency to distraction which comes from the lesson or recitation that is going on with the other class. To shut out from one's mind all objects that do not concern it and concentrate one's thoughts and observation upon a special given subject, whether it be a scientific presentation of the text-book or whether it be the investigation of a topic by means of objects themselves or by the use of many books—this kind of attention is of the utmost importance. It is that of individual industry, while the other kind is that of critical alertness. Critical alertness follows the thoughts of others; takes an active part in the dialogue which is going on. The ancients call this business of questions and answers and critical alertness the dialectic, and this kind of attention is that which is trained in dialectic. But the attention which is absorbed upon its object is a different matter. although of equal importance. The pupil should learn how to neglect the distracting circumstances of the schoolroom, the movements of pupils in the tactics of the class, the dialectic of question and answer going on with illustrations and points of interest, and equally the work of his fellow pupils in the class preparing themselves by absorbing study like his own. He lets these all slip by him, disciplining himself to abstract his attention from them and to hold himself in utter indifference to these outside events. He brings to bear his best intellect upon the problems of his task, critically questions the meaning of his author, and applies himself to the work of verifying by his own observation and reflection what is compiled for him by the author. He is learning by this private industry how to reinforce himself by the work of his fellow men; he cannot help himself through the help of others unless he verify their results. Verification is always an act of self-activity. Memorizing the text of the book, committing to memory what has been told one-this is not self-help until the internal work of verification has been accomplished.

The second kind of attention that we are here considering has therefore its most important feature in verification. What someone clse has seen and recorded the pupil must see for himself, if possible. What someone else has reasoned out by inference he must reason out himself and test the result by the activity of his own intellect.

At first the pupil finds himself with feeble will power and unable to absorb himself in his own task. He is easily distracted by what is going on around him. By using his moral will in self-control he gains strength from day to day in concentrating his attention and in neglecting all that is not essential in his individual industry.

Having enumerated these four cardinal duties in the schoolroom—
regularity, punctuality, silence, and industry—let us now note their
higher significance reaching beyond the schoolroom into the building
of character for life. The general form of all school work is that
of obedience. The will of the pupil comes into relation with the will of
the teacher and yields to its sway. The will of the pupil inhibits its
own wayward impulses, suppresses them, and supplants them by a higher
rational will. In the act of obedience to a higher will the pupil becomes
conscious of responsibility. Responsibility implies a sense of freedom.
The child becomes conscious of its ability to accept or refuse—to obey
or disobey. It becomes conscious of its power to originate actions and
to give a new form to the chain of causation in which it finds itself. The
great fact in the schoolroom is that the pupil is held responsible at each

and every moment for all that he does. If he forgets himself and uses his voice, if he whispers, if he moves from his seat, if he pushes a book off his desk by accident, all these things are brought back to him at once by the presiding teacher. He is responsible not only for positive acts but also for neglect. Whatever he does or whatever he leaves undone is his business; this is justly regarded as the most potent means of ethical instruction. To use the language of the founder of the great system of ethics in modern times, Immanuel Kant, the child learns in the school to have a sense of his "transcendental freedom." He learns that he and not his environment is responsible for what he does or leaves undone. He regards himself as the author of his deed; he recognizes it as true that he is in the midst of a flowing stream of causation; he is the focus of innumerable influences, all tending to move him in this or that direction or hold him in this or that position. But he recognizes himself as an original cause, a will power that can react on any and all the influences that are flowing inwards towards himself. He can modify this stream of causation; he can hold back and inhibit the several influences which flow towards him; he can shape all of these so as to conform them to the ideals of his freedom; he can act in such a way as to extend his influence upon the external world and upon his fellow human beings; he can act so as to realize his ethical ideals. This is the sense of transcendental freedom. Transcendental freedom does not mean that any person can do or perform anything that he wishes upon the external world, for that would be not merely transcendental freedom but absolute omnipotence. Transcendental freedom is not omnipotence, but the power to originate some modifications upon the stream of causality within which one finds himself. Freedom means self-determination instead of the determination of something else. The fact that a person could not modify anything in the world would not prevent him from having a transcendent freedom in case he could inhibit the influence flowing in upon him; if he could resist external influence he would thereby prove his freedom.

These considerations relate to what I have called the "semi-mechanical duties," notwithstanding they furnish so important a training to the will.

They constitute an elementary training in morals without which it is exceedingly difficult to build any superstructure of moral character whatever.

Moral education in the school, therefore, must begin in merely

mechanical obedience, and develop gradually out of this stage towards that of individual responsibility.

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The higher order of moral duties falls into two classes — those that relate to the individual himself, and those that relate to his fellows:

(a) Duties to self.—These are first physical, and concern cleanliness, neatness in person and clothing, temperance and moderation in the gratification of the appetites and passions.

The school can and does teach cleanliness and neatness, but it has less power over the pupil in regard to temperance. It can teach him self control and self-sacrifice in the three disciplines already named, punctuality, regularity, and silence, and in so far it may free him from thraldom to the body in other respects. It can, and does, labor efficiently against obscenity and profanity in language.

Duties to self include, second, that of self-culture. This duty belongs especially to the school. All of its lessons contribute to the pupil's self-culture. By its discipline it gives him control over himself and ability to combine with his fellow men; by its instruction it gives him knowledge of the world of nature and of man. This duty corresponds nearly to the one named prudence in ancient ethical systems. The Christian fathers discuss four cardinal virtues—temperance, prudence, fortitude and justice. Prudence places the individual above and beyond his present moment, as it were, letting him stand over himself, watching and directing himself. Man is a twofold being, having a particular, special self, and a general nature, his ideal self, the possibility of perfection. Self-culture stands for the theoretical or intellectual side of this cardinal virtue of prudence, while industry is its practical side.

(b) Duties to others.—Duties to self rest on the consciousness of a higher nature in the individual, and of the necessity of bringing out and realizing this higher nature. Duties to others recognize this higher ideal nature as something general, and hence as also the true inward self of our fellow men.

There are three classes of duties toward others;

(1) Courtesy—including all forms of politeness, good breeding, urbanity, decorum, modesty, respect for public opinion, liberality, magnanimity, etc., described under various names by Aristotle and others after him. The essence of this virtue consists in the resolution

to see in others only the ideal of humanity and to ignore any and all defects that may be apparent.

Courtesy in many of its forms is readily taught in school. Its teaching is often marred by the manner of the teacher, which may be sour and surly, or petulant and fault-finding. The importance of this virtue both to its possessor and to all his fellows demands a more careful attention on the part of school managers to secure its presence in the schoolroom.

(2) Justice.—This is recognized as the chief in the family of secular virtues. It has several forms or species, as, for example, (a) honesty, the fair dealing with others, respect for their rights of person and property and reputation; (b) truth-telling or honesty in speech—honesty itself being truth-acting. Such names as integrity, uprightness, righteousness, express further distinctions that belong to this stanch virtue.

Justice, like courtesy in the fact that it looks upon the ideal of the individual, is unlike courtesy in the fact that it looks upon the deed of the individual in a very strict and businesslike way, and measures its defects by the high standard. According to the principle of justice each one receives in proportion to his deeds and not in proportion to his possibilities, wishes, or unrealized aspirations. All individuals are ideally equal in the essence of their humanity; but justice will return upon each the equivalent of his deed only. If it be a crime, justice returns it upon the doer as a limitation of his personal freedom or property.

The school is perhaps more effective in teaching the forms of justice than in teaching those of courtesy. Truth-telling especially receives the full emphasis of all the power of school discipline. Every lesson is an exercise in digging out and closely defining the truth—in extending the realm of clearness and certainty further into the region of ignorance and guesswork. How careful the pupil is compelled to be with his statements in the recitation and with his previous preparation!

Justice, in discovering the exact performance of each pupil and giving him recognition for it, may become injustice in case of carelessness on the part of the teacher. Such carelessness may suffer the weeds of lying and deceit to grow up and it may allow the dishonest pupil to gather the fruits of honesty and truth, and by this it may offer a premium for fraud. The school may thus furnish an immoral educa-

tion, notwithstanding its great opportunities to inculcate this noble virtue of honesty.

The private individual must not be permitted to return the evil deed upon the doer, for that would be revenge, and hence a new crime. All personality and self-interest must be sifted out before justice can be done to the criminal. Hence we have another virtue—that of respect for law.

(3) Respect for law, as the only means of protecting the innocent and punishing the guilty, is the complement of justice. It looks upon the ideal as realized, not in an individual man, but in an institution represented in the person of an executive officer who is supported with legislative and judicial powers.

The school, when governed by an arbitrary and tyrannical teacher, is a fearfully demoralizing influence in a community. The law-abiding virtue is weakened and a whole troop of lesser virtues take their flight and give admittance to passion and appetites. But the teacher may teach respect for law very thoroughly, on the other hand. In this matter a great change has been wrought in the methods of discipline in later years. Corporal punishment has been very largely disused. It is clear that with frequent and severe corporal punishment it is next to impossible to retain genuine respect for law. Punishment through the sense of honor has, therefore, superseded for the most part in our best schools the use of the rod. It is now easy to find the school admirably disciplined and its pupils enthusiastic and law-abiding—governed entirely without the use of corporal punishment.

The school possesses very great advantages over the family in this matter of teaching respect for law. The parent is too near the child, too personal to teach him this lesson.

III.

Higher than the properly moral duties—those duties to self and to others—or at least higher than the secular or "cardinal" virtues—justice, prudence, fortitude, and temperance—are certain ones which are called "celestial" virtues by the theologians; these are faith, hope, charity, and their special modifications.

The question may arise, Whether any instruction in these duties can be given which is not at the same time sectarian? An affirmative answer will have to show only that the essential scope of these virtues has a secular meaning and that the secular meaning is more fundamental than in the case of the so-called cardinal virtues.

(1) Faith in a theologic sense means the true knowledge of the first principle of the universe. Everybody presupposes some theory or view of the world, its origin, and destiny, in all his practical and theoretical dealing with it. Christendom assumes a personal Creator having a divine-human nature, who admits man to grace in such a way that he is not destroyed by the results of his essential imperfection, but is redeemed in some special way. The Buddhist and Brahmin think that finitude and imperfection are utterly imcompatible with the Divine Being, and hence that things of the world cannot be permitted to have real existence; they exist only in our fancy. Here is no grace and no redemption. Nature is not a real existence to such a theory, and hence also there can be no natural science. Faith in the divine reason is necessary for science.

The prevailing view of the world in Christian countries is very properly called faith, inasmuch as it is not a view pieced together from the experience of the senses, nor a product of individual reflection, unaided by the deep intuitions of the spiritual seers of the race.

Faith is a secular virtue as well as a theological virtue, and whoever teaches another view of the world—that is to say, he who teaches that man is not immortal and that nature does not reveal the divine Reason—teaches a doctrine subversive of faith in this peculiar sense, and also subversive of man's life in all that makes it worth living.

- (2) Hope, the second theological virtue, is the practical side of faith. Faith is not properly the belief in some theory of the world, but in that particular theory of the world that Christianity teaches, so that hope is not a mere anticipation of some future event, but the firm expectation that the destiny of the world is in accordance with the scheme of faith, no matter how much any present appearances may be against it. Thus the individual acts upon this conviction. It is the basis of the highest practical doing in this world. A teacher may show faith and hope in the view of the world which he expresses and in his dealings with his school—in his teaching of history, in his comments on the reading lessons, in his treatment of the aspirations of hts pupils. Although none of these things may be consciously traced to their source by the pupils, yet their instinct will discover the genuine faith and hope. Nothing is so difficult to conceal as one's conviction in regard to the origin and destiny of the world and of man.
- (3) Finally, charity is the highest of these virtues, in the sense that it is the concrete embodiment and application of that view of the world

which faith and hope establish. The world is made and governed by divine grace, and that grace will triumph in the world. Hence, says the individual, "Let me be filled with this principle and hold within myself this divine feeling of grace towards all fellow creatures." Charity is therefore not mere almsgiving, but a devotion to others. "Sell all thou hast . . . and follow me." Faith perceives the principle; hope believes in it where it is not yet visible; charity sets it up in the soul and lives it. There might be conceived a faith or insight into this principle of divine grace and a hope that should trust it where not seen, and yet there be in the possessor of the faith and hope a lack of charity. In that case the individual would acknowledge the principle everywhere, but would not admit it into himself. With charity all other virtues are implied—even justice.

While courtesy acts towards men as if they were ideally perfect and had not defects; while justice holds each man responsible for the perfect accordance of his deed with his ideally perfect nature and makes no allowance for immaturity, charity or loving kindness sees both the ideal perfection and the real imperfection, and does not condemn, but offers to help the other, and is willing and glad to sacrifice itself to assist the imperfect struggle towards perfection.

The highest virtue, loving kindness or charity, has of all virtues the largest family of synonyms—humility, considerateness, heroism, gratitude, friendliness and various shades of love in the family (parental, filial, fraternal, and conjugal), sympathy, pity, benevolence, kindness, toleration, patriotism, generosity, public spirit, philanthropy, beneficence, concord, harmony, peaceableness, tenderness, mercy, grace, long-suffering, etc. The typical form of this virtue, as it may be cultivated in school, is known under the name of kindness. A spirit of true kindness, if it can be made to pervade a school, would be the highest fountain of virtue. That such a spirit can exist in a school we know from many a saintly example that has walked in the path of the Great Teacher.

From the definition of the principle it is easy to deduce a verdict against all those systems of rivalry and emulation in school which stimulate ambition beyond the limits of generous competition to the point of selfishness. Selfishness is the root of mortal sin, as theologians tell us, and the lowest type of it is cold, unfeeling pride, while envy is the type next to it.

In closing let us call up the main conclusions and repeat them in their briefest expression.

- 1. Moral education is a training in habits and not an inculcation of mere theoretical views.
- 2. Mechanical disciplines are indispensable as an elementary basis of moral character.
- 3. The school holds the pupil to a constant sense of responsibility and thereby develops in him a keen sense of his transcendental freedom; he comes to realize that he is not only the author of his deed, but also accountable for his neglect to do the reasonable act.
- 4. Lax discipline in a school saps the moral character of the pupil. It allows him to work merely as he pleases, and he will not reinforce his feeble will by regularity, punctuality, and systematic industry. He grows up in habits of whispering and other species of intermeddling with his fellow pupils; neither doing what is reasonable himself nor allowing others to do it. Never having subdued himself, he will never subdue the world of chaos, or any part of it, as his life work, but will have to be subdued by external constraint on the part of his fellow men.
- 5. Too strict discipline, on the other hand, undermines moral character by emphasizing too much the mechanical duties, and especially the phase of obedience to authority, and it leaves the pupil in a state of perennial minority. He does not assimilate the law of duty and make it his own.

The law is not written on his heart, but is written on his lips only. He fears it, but does not love it. The tyrant teacher produces hypocrisy and deceit in his pupils. All manner of fraud germinates in attempts to cover up shortcomings from the eye of the teacher. Even where there is simple implicit obedience in the place of fraud and the like there is no independence and strength of character developed.

The best help that one can give his fellows is that which enables them to help themselves. The best school is that which makes the pupils able to teach themselves. The best instruction in morality makes the pupil a law unto himself. Hence strictness which is indispensable must be tempered by such an administration as causes the pupils to love to obev the law for the law's sake.

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RELATION OF THE SCHOOL STUDIES TO MORAL TRAINING.

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The very title of this paper suggests a dualism. There are the school studies, and there is moral training. The problem appears to be to bring them into relation with one another. From his popular common-sense point of view the plain man will willingly accept this dualism, and will readily believe that he is acting upon it. His belief is naturally strengthened when he finds that the ordinary text-book on school method adopts a triple division, and treats education under the heads: Physical, Intellectual, Moral. This crude materialization of a convenient classification is what every thoughtful man is prepared for, but few are sufficiently alive to the practical outcome in the popular view of educational problems.

How far this mechanical view of education—supported by a few tags from proverbial philosophy clustered round the popular fallacy of the necessity of doing one thing at a time—can mislead is shown with great vividness in the extraordinary methods adopted by some Scottish parochial schoolmasters no further back than the beginning of this century. They kept the pupil at reading till he could read, then at writing till he could write, and thereafter promoted him to arithmetic till he could, as they put it, "count." After that, if time remained, the pupil could apply his acquirements to the humanities, or other branches of real learning.

In their view of the function of those school studies that are commonly known as the three R's, Professor Huxley and Sir John Lubbock make an advance upon this naïve method. Reading, writing, and elementary arithmetic are regarded by these writers as purely preparatory subjects, valueless in themselves, and only of consequence in view of the use to be made of them afterwards. They are knife-and-fork studies, that only justify their existence when applied to other studies that may represent the dinner. The distinction is good

enough as a working hypothesis, and has done capital service in fighting the battle of higher education for the masses, but underlying it is an assumption that cannot be allowed to pass unchallenged. Is it possible to exercise the mind without in any way changing it, without, in other words, educating it? If reading means nothing more than uttering the sounds represented by certain symbols, if writing demands no more than the reproduction of certain arbitrary signs, if arithmetic limits itself to the mechanical application of certain rules, there may be some justification for the distinction between purely knife-and-fork studies and dinner studies, though even then it may be objected that the most mechanical of actions begins originally in the upper brain, however speedily the direction of it may be transferred to the lower. But as a matter of fact, even in the most rule-of-thumb teaching, reading, writing, and arithmetic imply more than the above limitations would permit. However badly a child is taught to read, he cannot help attaching some meaning to what he reads. A child cannot learn to read without at the same time learning something about what he reads. So intimate indeed is the connection between the purely mechanical and the intelligent that we have the highest authority for saying that concentration on the merely mechanical is a positive hindrance to the cultivation even of the mechanical. Says Mr. Moseley in his report on Dean Dawes' King's Somborne School:

"Here where so many other things are taught besides reading, the children are found in advance, in reading, of other schools, in the majority of which scarcely anything else is taught."

And again:

"The singular slowness with which the children of our national schools learn to read is in some degree to be attributed to the unwise concentration of the labors of the school on that single object."

Purely knife-and-fork studies cease to be studies altogether; they have no meaning in psychology, and no existence in fact.

Further, why limit the knife-and-fork stage to the three R's? The medical student who has to learn some chemistry, botany, and elementary biology before he can commence his real medical studies, might very well regard those studies as knife-and-fork studies in relation to the dinner studies that make up his professional curriculum. Botany, which is a dinner study to the boy in the primary

Quoted by Sit John Lubbock, Addresses, p. 71.

school, is only a knife-and-fork study in the medical college. As a matter of fact each school study, the most advanced as well as the most elementary, is at once a dinner study and a knife-and-fork study. The distinction is not a distinction among studies, but among stages in the same study in relation to other studies. The ideal state of shorthand writing is that of a knife-and-fork study. The teacher's whole object is often nothing more than to reduce the subject to this position. But the very fact that he has to reduce it shows that it was originally something else. In the process of being acquired, in fact, shorthand is a dinner subject.

The mind is one and indivisible and can recognize no distinction of a radical kind in its relations to the various subjects upon which it is exercised. All the school subjects therefore must be taken into consideration when we seek to examine the moral aspect of our school work. We take all knowledge to our province so far as knowledge is represented in the school curriculum, and our business is to discover what connection there is between those ordinary subjects and moral training.

Having settled what we mean by school subjects, it remains to come to an understanding as to the notion of morality that we are to adopt. The work of establishing an ethical basis for these discussions does not lie to my hand, but from Professor Dewey's other utterances I judge that my view of the nature of morality will not conflict with his. In what follows I shall adopt the position of the German idealists so far as ultimate explanations go, and seek to use Herbartian principles in applying those explanations to the practical work of education. In short, I shall base my ethics on idealism, and my educational application on the Herbartian psychology. Herbart's antagonism to idealism is not nearly so absolute as he imagined, and after all only showed itself in the metaphysical basis of the two systems. The Fichtean and the Herbartian positions can be reconciled with mutual advantage. The trend of criticism among the Herbartians themselves is in this direction, and nowhere is this more clearly brought out than in that most helpful monograph in which Professor Dewey has treated the doctrine of interest.

The only true aim of every individual is self-realization in the widest and truest sense of the term. But here, at the very threshold, a serious difficulty arises. The mere phrase self-realization suggests an objection of the first importance in education. If true develop-

ment is self-development, development from within in accordance with the laws of our nature, is there room in the process for an educator? Does it not seem almost self-evident that a master, so far from aiding in true development, must of necessity hinder it by imposing on the developing self an influence other than that of the developing ego? This difficulty is at the bottom of the popular saying that all true education is self-education. But even Jacotot in his depreciation of teachers does not go to the root of the matter. It is a strange demonstration of the uselessness of teachers that results in perhaps the most absolute of all methodologies. The same difficulty is felt in Rousseau's system, but is evaded by the somewhat silly plan of overt maction. Why write a volume on education to prove that the teacher is a negative quantity in education?

The radical difficulty shows itself to be what it is in Pestalozzi, and still more clearly in his successor Froebel. The cause of this recognition of the difficulty, and the attempt to meet it is to be found in the fact that those writers based their theory of education upon more or less clearly conceived idealistic principles.

It is true that Rousseau usually gets the credit of being the philosopher who won Pestalozzi for education. But Pestalozzi lived a long life and the force that impelled him to education was not the only one that modified his thought. Kant was just finishing his university studies when Pestalozzi was born, and by the time the educator had found his vocation, and was actually engaged in it, the Kantian thought was beginning to make itself felt. The germs of idealism were in the air, Pestalozzi could not hope to escape the infection. The plant metaphor, which has since been so overworked, appears to have had considerable influence in modifying his principles, but the metaphor was only a concrete statement of the idealist position. As Kant was followed by Hegel, so Pestalozzi was followed by Froebel, and in both cases a distinct advance in idealism has been made. From our present standpoint, principles not persons interest us. We are not specially concerned with either the Pestalozzian or the Froebelian developments, the important thing is that the development of the whole school has given a clear demonstration of the educational effects of the theory of self-realization.

There exists at this moment a large and important school of educationists who ground their opinions on a more or less intelligent interpretation of the life and works of Pestalozzi and Froebel. They

have outlived the philosophical difficulties that troubled their later master. They have a system which experience has proved to be valuable, and they are inclined to rest content without going into uncomfortable details. It was otherwise with Froebel. He keenly felt the initial difficulty of his system, and throughout the whole of his Education of Man he struggles, with more or less success, to justify the educator in interfering in the work of education at all. The ordinary kindergartners dabble in the mechanism of idealism without in the least understanding the nature and necessity of the primary assumption that gives it life and meaning. Naturally, as soon as they set themselves to think at all, they come to a deadlock. The child is like a plant. It can grow and develop, it is true, but only in a determinate way. True education must therefore aim at permitting and encouraging the child to develop in the greatest possible freedom. Froebel sees this very clearly: "Therefore education, instruction, and teaching should, in the first characteristic, necessarily be passive, watchfully and protectively following, not dictatorial, not invariable, not forcibly interfering." Further, in the following section we are told: "The still young being, even though as yet unconsciously, like a product of nature, precisely and surely wills that which is best for himself, and, moreover, in a form quite suitable to him, and which he feels within himself the disposition, power, and means to represent."

If, then, the child thus makes for what is for his good as certainly as a duckling makes for water, it is obvious that the occupation of the teacher is in a parlous state. Why employ a man to make a child do what the child cannot help doing? The usual reply is botanical. A given seed can produce nothing but a particular plant, and yet there may be work for a gardener. The very elaborate system of gifts and occupations that make up the kindergarten shows that Froebel regarded education as at least possible, and by inference desirable. We are therefore entitled to a better argument than a mere analogy. The problem is how to find a place for the teacher between a developing nature with a determination towards good, and a world that is by hypothesis good inasmuch as "all has proceeded from God, and is limited by God alone."

Froebel's answer rises above botany. The educator, he tells us, is himself a part of the world in question. He has therefore a place.

^{*} Education of Man, part 1, 8 7.

^{*} Ibid , & 1.

That this place is consistent with the rest of the theory is manifest, because the teacher who is found imposing laws and restrictions on the child "himself is strictly and inevitably subjected to a perpetually governing law; to an unavoidable perpetual necessity: thus all arbitrariness is banished." The educator must at every moment act under two different influences which yet lead him to the same line of conduct. He must guide and be guided. His consistency as governed and governor is guaranteed by the continual reference of himself and his pupil to an invisible* and invariable third. The teacher, while seeking to enable the pupil to attain to self-realization, must seek at the same time to realize himself. Only by rightly guiding the pupil can the master himself be right. If the boy's nature and the master's are each developing freely, then their actions must of necessity fit into each other and produce a harmony which is the invisible and invariable third, in other words, the inherent rationality of the universe.

In education, as in some other directions, the idealist position has been accepted timidly and incompletely. Instead of boldly accepting the whole of the doctrine thus enunciated in the Education of Man, later Froebelians have selected for special emphasis the principle Find what Nature intends for the children and follow that. "A passivity, a following," has become the watchword of the later Froebelians, and so true are they, in theory at least, to this viewpoint, that it is hardly to be wondered at that a sort of general paralysis is the result. So passive must the Froebelians become, if they are true to their theory, that they must cease to have any influence over their pupils at all.

When we consider the bewildering paraphernalia of gifts and occupations in the kindergarten, we are inclined to think that the Froebelians have hardly been loyal to their principle of non-interference. The justification usually offered is that the various exercises have been discovered by experiment to be exactly the sort of thing that Nature demands, and that the teacher in applying his methods is, after all, only "passive, following."

It would be unfair to the system, and not to our present purpose, to argue from the fact that anything more unnatural than many of the practical applications of the kindergarten principle it would be impossible to find. The principle can hardly be held responsible for the rigid and therefore irrational applications made by unsympathetic

Lducation of Man, part 1, § 12.

^{*} Ibid., § 13.

^{3 /}bid., § 14.

teachers. Yet it is surely not unreasonable to maintain that a "benevolent superintendence" is too modest a name for the complicated system the Froebelians have now elaborated. The value of the kindergarten system is not the point at issue; the question is, Can the "passive, following" theory be held to be consistent with the system as now developed?

By observation it is found that children are fond of making things, of expressing thus their own ideas, of "making the inner outer." When the teacher gives them the opportunity of exercising this power or gift he feels that he is "passive, following." He is but the jackal that provides the meat; the eating is the part of the child. If the teacher is content with this function nothing more need be said. Education is recognized as a mystery. Given a child and certain materials it is found that a certain result is produced. This may be interesting as a fact in natural history. It cannot be held to explain anything. The educator does not educate; the child is his own educator.

There is obviously a sense in which it is true that all education is self-education. No man can learn for another; no man can be moral for another. Jacotot's definition of teaching—causing another to learn—has been discredited. Can the definition of education—causing another to develop himself according to the laws of his own nature—be defended? By the conditions of the case the subject must develop somehow; the only point left for consideration therefore is, can we modify this development so as to produce the best result possible in the given case? This again involves two distinct problems. First, we have to discover what the highest form of development possible in the given case really is. Secondly, we have to discover some means of attaining this form.

The first problem, as stated above, is insoluble. No doubt were all the conditions of the case known the highest form of development possible for the given subject would be at once evident. But such knowledge is absolutely beyond our finite minds. Viewed sub specie aternitatis the problem ceases to be a problem, and becomes a mere statement of fact. Unfortunately this point of view is not attainable.

The case is not yet altogether hopeless. The second problem, that seems to depend upon the first for its very conditions, may itself supply the solution to the first. In working out its own development the ego may indicate its own ideal; indeed, must indicate that ideal.

The important question that now arises is, Does it indicate that ideal soon enough for the educator to profit by the indication? Even if this question can be satisfactorily answered, there remains the final problem, Can an external mind have any share in determining the development of a self-determining organism?

The question must be faced fairly. Let us give up all metaphors, however convenient. Above all, let us cast overboard that wearisome acorn with its resulting tree. We admit cheerfully that the tree is implicit in the acorn, and that we can discover certain laws which aid us in furthering the development of the oak. But a child is not an acorn, a man is not a tree. We may endow an acorn with life, organic life; we may, if we will, endow it with a sort of generalized consciousness; but in the case of the child there is something quite new, and much higher than the highest we can possibly attribute to the tree. The oak is no doubt as absolutely self-determined as is the child, but it is not consciously self-determined. The developing human being is not only self-determined; it is self-conscious.

How does this new element affect the case? Can external influences modify self-development characterized by self-consciousness, in the same way as it modifies self-development not so characterized? Manifestly it can, in a negative sense at least. The environment, conscious or unconscious, can and does interfere with the full and free process of self-realization. A force which can hinder may reasonably be assumed to be able to help. By merely withholding its action the environment may be said to produce a positive effect. Yet it must not be forgotten that in the process of development there are two forces, an outer and an inner, and any influence must differ according as its incidence comes from within or from without.

We have the antagonism between two forces: the self-developing ego on the one hand and the environment against which it strives on the other. It is in and through this strife that the ego realizes itself, so far as it rises above the antagonism and attains an ever higher and higher unity. If the educator is to exercise any influence at all, he must throw in his force either with the ego or the environment.

The natural thing is to throw in his influence with the struggling ego, but what is the result? Suppose by his help a higher unity is obtained, how does the self-realizing ego fare? The unity thus attained may be real for the educator; it is empty for the struggling ego. This mistake in moral training is exactly parallel to that

popular blunder in intellectual education. The blunder of blunders is to supply cut and dry definitions and rules that certainly introduce order among the confused masses of presented ideas, but an order that is meaningless. The child is struggling to understand the meaning of the concept abstract noun. There is a manifold of presented ideas. The teacher may give his cut and dry definition which produces an appearance of order. This definition that imposes a mechanical unity on the hitherto rebellious manifold may be perfectly accurate, and may represent a real unity to the teacher. To the child it is a hindrance. No general principle can be of use to a child till he has worked for it, that is, till he has made it his own by rising above the antagonism of the particulars it combines.

To seek to aid the ego, then, by directly helping it, is to weaken it. Even if we understand the ideal the ego seeks to attain, we cannot directly aid it in its efforts, for in so doing we reduce the development below the level of conscious self-realization.

The place of the educator is therefore obviously limited to the environment; he is but one of the manifold against which the ego reacts. We must influence the ego by means of its limitations. If we can so modify the environment that the ego must react upon it in a determinate way, we seem to be able to influence the ego directly, and to restrict its power of self-development. Yet the very power thus exercised is possible only because of the laws according to which the organism develops itself. If the developing organism responded capriciously to given forces, it could not be said to be self-determined. A perfectly unlimited self ceases to be a self at all, and loses all meaning. If, then, the child answers the educator's stimulus exactly as the educator expects, it is because the nature of the child demands that this reaction and no other shall follow this stimulus.

It may be here objected that, if this be so, man-making is really possible; the child is clay in the hands of the potter. All the educator has to do is to discover the laws according to which the child develops, and apply this knowledge. To this a cheerful assent may be given. So far as the educator knows the laws according to which a child develops, so far is that child clay in his hands to make of it what he will. Nor does this admission in the least endanger the independence of the child as a self-determining organism. The educator can make of the child what he will only by obeying the laws of the child's development. The very freedom that marks the self-development of the child is the accessity which impels him to act as the educator leads him to act. The

child realizes himself fully and freely in the environment that has been modified by the educator. Not less freely and fully does the educator realize himself in the environment which he has modified.

Viewed from too close a standpoint there seems here to be a distinct contradiction. How can a child be at the same time self-determined and determined by another? Viewed from a higher level the contradiction disappears, and the two forces, the child-ego and the educatorego, are seen to form parts of a wider organism in which each finds its only possible freedom in attaining a harmony with its surroundings, in acting thus and thus and not otherwise.

If this be so it may be asked, Why do educators, as a matter of fact, so often fail to obtain that determining power over their pupils? It is generally admitted that within certain narrow limits the educator does mold the character of the pupil as the potter does the clay, and when the matter is looked into with any degree of care those limits are found to be constituted by the bounds of the educator's knowledge of the laws according to which the pupil-ego is self-determined.

The objection of the loss of freedom of the child whose nature is guided by the skillful teacher may be met by the correlative objection of the loss of freedom on the part of the teacher. If the child must react in a fixed way to certain stimuli, he seems to lose his freedom; but what of the freedom of the teacher? In order to modify in a given direction the development of a given organism the educator must modify his own energies in a definite direction, must, in short, to some extent give up the freedom of his own development.

There is no fatalism here. Educator and educated develop alike according to the laws of their being. The fact that a complete knowledge of the nature of the educated would enable the educator to modify the development in no way interferes with the free self-development of the educated. Such complete knowledge is admittedly unattainable, but supposing it to be attained by the educator, he would by that very knowledge have ceased to be an educator. He has risen to a point of view from which he can look with full comprehension upon both parties in the work of education. He sees that master and pupil in their action and reaction upon each other are gradually working out their differences, and are attaining ever higher and higher levels at which certain of the antagonisms of the process disappear. What causes it to appear that the ego of the educator is dominating the ego of the educated is that the former always works from a slightly higher level.

He cannot, indeed, rise to such a height as to be able to envisage at one sweep all the antagonisms and reconciliations that make up the entire sphere of education, but he is always working from a level high enough to resolve the immediate antagonism that makes up the now of education at any given moment.

Underlying all this is the great assumption of idealism, which I am quite content to receive and acknowledge as an assumption. We cannot transcend thought. We cannot prove the organic unity of the universe; but if the universe be not an organism, if there be no reason underlying the manifold of experience, then philosophy has no meaning for me. All the same, those wide generalities, while showing that explanation is possible, that a system of education is within the grasp of complete knowledge, give little help in the practical work of teaching. Within this rounded whole that makes up the idealist's universe we must begin our work somewhere; we must have a system that fits into the limited area within which we live. Our practical method does not require to supply a complete explanation of its principles; the essential thing is that it shall not contradict any of the findings of the more general theory set forth above.

Coming down from the clouds, let us try how the thing works out. Given a newly born child, how can the educator bring his influence to bear upon it? The faculty psychologist is at once busy with talk about exercising the faculty of discrimination by changes of light and temperature. This exercise demands, he tells us, a rudimentary form of memory and of judgment. And thus the building up of the ego proceeds. The whole process may be summed up in the word training.

In modern educational works this word has acquired a sort of sacred meaninglessness. To use it, indeed, is to set a problem, and it is perhaps not too much to say that the expression moral training, in the title of this paper, introduces a second line of dualism. Study and training are obviously treated as opposed to each other. We study the ordinary school subjects; but when we come to morals it is a matter of training.

Few words labor under so great a weight of assumptions as this of training. Naturally its use is marked by a great deal of vagueness, but as often as it is used it appears to connote a process that is peculiarly philosophical yet practical. Despite its ordinary vagueness it is not left without a fairly well-defined special meaning. Quick, for

example, would divide all educators into the three classes -- realists. humanists, and trainers; and the school of educators who follow David Stow claim to form what they call "the training school." If we have regard to the results of the process of education, the triple classification obviously implies a cross division; for each of the schools claims to train its pupils, though they differ in their way of bringing about this result. The realist works with things, the humanist with words, but the result in both cases is held to be a well-trained mind. The classification that Ouick really implies is twofold. The realists and humanists form one class as contrasted with the trainers. The former lay stress upon the material upon which the mind is to be exercised, the latter upon the mind itself. Comenius, sense-realist though he was, thought ultimately of the mind, though he dealt primarily with things and pictures. Sturm, the humanist, beyond his Delectuses and dictionaries, did not lose sight of the mind. Without pressing the distinction too closely, it may be said that teaching lays stress on the knowledge to be conveyed, training rather on the process of conveying it, and particularly on the effect of this process upon the mind of the pupil,

Sometimes, indeed, a lower view of training is held. In his Introduction to the Pedagogy of Herbart, Ufer says, "Animals cannot in any sense be educated; they can only be trained. Education is an influence upon man. When a person is spoken of as well educated we do not think of bodily qualities. The educating influence has reference to the soul, and concerns itself with the body only in so far as the care of the latter is immediately serviceable to the former."

The very existence of the training school proves that this comparatively low view of the meaning of training is not generally recognized; yet there is something underlying it. At college there are trainers for the river and tutors for the schools. As usual, whatever difficulty there is arises from a metaphor. The process represented by the word is carried boldly over from the body to the mind. Fortunately there is in this case more than the usual attenuated connection between the two terms of the metaphor. In the last resort physical training consists in teaching an animal to perform certain acts easily by making it do them very frequently. Here it is the first step that costs. After the act has been done once there is little difficulty in having it repeated till it can be done perfectly. Faber fabricando is the trainer's motto.

In physical training this first step causes no real difficulty. A dog is taught to pretend to smoke a pipe by having the pipe placed in his mouth; the rest of the training resolves itself into biscuits and blows. In the region of morals the same thing may be applied to a limited extent. We may make a child act in certain ways by sheer physical force, and then by rewards and punishments translate isolated acts into habits. This is probably all that is implied in the aphorism adopted by the training school: "Train up a child in the way he should go, and when he is old he will not depart from it."

But this is not enough. If it were, we would not have got beyond the Aristotelian idea of virtue as a bundle of good habits. Many writers, among them Locke, are content to accept this view of moral training, at any rate in the earlier years. At this point the young mind is regarded as incapable of reason; there can be no real thought about morals; the practice of virtue must precede the principles.

There is a place in practical life for automatic virtue, not merely in bodily habits, but in those more intangible influences that make up so great a part of moral and intellectual life. But such a virtue is a terminus ad quem. It explains nothing, and indeed increases the need for explanation. No system of moral training can recognize mere habit as the ultimate moral aim. If the soul becomes a mere self-acting machine, morality is impossible. We attach no blame to the dynamitard's clockwork.

Are we then driven back upon the Socratic Virtue is knowledge? Can we not be moral without being consciously moral? The answer is yes or no, according to the time element involved. An act which is purely a reflex act is in itself unmoral, neither moral nor immoral; but the process by which a deliberate act has been changed into a reflex one is a moral process. Without making too much of the distinction, it may be maintained that all acts that depend on the cerebrum are moral; those that can trace their origin no further back than the cerebellum are unmoral. Botanists tell us that at the tip of each budding twig there is a point at which all the cells that are generated come into being undifferentiated. In all the other parts of the plant the cells begin their existence with a definite bias; they are bast cells, or sap cells, or fibre cells; they are that and can be nothing else. Only the undifferentiated cells at the growing point are fitted to become any sort of cell that the plant stands most in need of. The part of our being that deals with entirely new cases is our moral

growing point. Most of our nature soon gets a set which is moral only from what it implies in the past; the real living morality must be looked for in the application of principles to new cases. In real life every time a drunkard gives way to his craving we hold that he is guilty of an immoral act, and hold him responsible for it, yet our condemnation should, in fairness, fall not upon the individual act, but upon the series of acts which rendered this individual act inevitable. It is true that the drinking habit hardly reaches the purely reflex stage; but in some cases it comes extremely close to it, and the closer it comes to this point the less the responsibility of the subject for each individual act.

Underlying all the theories of training is the fundamental assumption of capacity. We can only train within the limits of this assumed capacity. No amount of training, however skillful and earnest, can make a fish capable of living on dry land, or make a man able to live under the water. It is true that the evolutionist will here put in a demurrer, and maintain that the development of our present fauna is simply a process of training for which the time has been adequate. Given a sufficient number of thousands or millions of years, it may be that man could be trained to live under water, but this hardly affects the practical question of moral training. It is enough for us that such a theory is not inconsistent with the wider principles we have already accepted. Within the narrow limits of our area of action we do find that this limitation of capacity is of the first importance, and leads straightway to the consideration of the question of relative capacities. Have all men the same capacity for moral training? This question I have dealt with elsewhere, and as it does not directly affect the relation of the organon of moral training to the result, it may here be passed by.

Whatever be the original capacity of the soul, the Herbartian psychology shows how character can be built up by the supply of proper ideas, and the reaction of the soul upon them. With Herbart the organon of moral training is the idea. What is a figure in other systems becomes here a statement of dynamical laws. Unlike the Froebelian theorist, the Herbartian is not content to play the part of a benevolent superintendent whose only business is to stand by. He does in accordance with his system what the Froebelian only does in contradiction of his. He presents certain ideas to the soul of the pupil; he knows exactly what the reaction upon those ideas will be.

The result of this reaction is a change of a definite character in the soul. The Herbartian is a soul-builder, a man-maker.

Since ideas are the bricks out of which the Herbartian builds character, it is manifest that all sources of ideas become of the utmost importance. Obviously the most fruitful source of ideas for the master is the ordinary school curriculum. The usual school studies supply an almost endless series of ideas for the master to use in moral training. For it must not be supposed that intellectual character is built up out of intellectual ideas, and moral out of moral ideas. Herbart recognizes no such distinction. All ideas work together for good or for evil according as they are applied.

The first and lowest function of the school studies as a moral organon is to supply material upon which the soul may act. Moral action demands an environment. It is something concrete, something living. It is not a matter of abstraction, but of action and interaction.

"Es bildet sich ein Talent in der Stille, Sich ein Charakter in dem Strom der Welt."

What we want, then, is not the idea, but the idea in action. To have a moral force the ideas must be combined into intelligible wholes, having a direct bearing on life. No doubt the ideas supplied by the playground and the home are richer in moral possibilities than those of the school studies, but our present business is not to lament our limitations, but rather to show how to make the best use of the ideas for which we are largely responsible.

Perhaps the lowest motive a parent can have in sending his child to school is to be rid of it, to get it out of the way. If the school did nothing but meet this wish it would still do a moral work, for keeping a child employed is a moral work, as is indirectly proved by the popular equivalent "keeping him out of mischief." But by the very terms of the popular saying the question of moral quality is introduced. It is not merely to be kept employed that the child is sent, it is to be well employed. Children who do not go to school are not of necessity idle; often they are abnormally active. It is not want of occupation that marks off the gutter child from the schoolboy, but the kind of occupation. Even the mischief that Satan finds at least removes the reproach of idle hands.

Here we find the first trace of that direct connection between the nature of the ideas and their effect in moral training which we will

find continually forcing itself upon us. Ideas are not mere stuff to work up morals on. One idea is not as good as another. If a boy learns to be busy simply by being busy it does not seem clear that what he is busy about has anything to do with the training in busyness. If industry is the virtue aimed at, it seems to be as easy to attain it by being an industrious forger as by being an industrious banker. It does not matter what you keep a boy working at in school so long as you do keep him working. Keeping him at it, whatever it may be, results in the acquiring of industry.

The slightest reference to real life damages this theory. An industrious forger is seldom an industrious anything else. The idle apprentice is not uncommonly an industrious billiard player. The boy who is industrious over his geography may be lazy at his mathematics. Is there such a thing as industry in the abstract, industry per se apart from any matter?

It may be said that industry is not a very fair example, as it may be readily reduced to an effect of interest. We are industrious about what we are interested in either as a means towards an end, or as an end in itself. Take, then, the virtue of caution or prudence. This may be trained by the master setting in the arithmetic paper certain catch questions that will prevent the pupil from rushing to a rule without thought. Does the caution thus acquired extend to other subjects in which catch questions are not used? Is it not the case that the pupil is cautious in arithmetic and as venturesome as before in other subjects? Caution, like industry, takes color from its environment; one is cautious about this or that, not about things in general. It is the fire that the burnt child dreads. We are only cautious where we suspect danger. The man who is cautious about gunpowder, with which he is acquainted, may be reckless in dealing with gun-cotton, of which he knows nothing.

(Some pupils are naturally of a more cautious temperament than others. With this matter we have at present no concern. A temperament is not morality; the only moral question is the way in which temperament is modified.)

While this is true, it cannot be denied that a virtue acquired in one connection seems to have a tendency to spread, if the expression may be allowed, into other connections. Mathematics is supposed to cultivate in the soul the habit of accuracy, and it is generally believed that the habit of accuracy thus acquired does not limit itself to mathemat-

ical problems. But when cases are examined in which the habits of accuracy are transferred to other subjects, it will be found that not a habit of accuracy has been transferred, but a habit of regarding facts from a certain standpoint. A poet and a mathematician describe a scene, and the unreflective mind is very apt to exclaim at the accuracy of the mathematician. As a matter of fact, the two descriptions may be of precisely equal accuracy. There is nothing specially accurate in the mere use of figures and symbols. From a mathematician's point of view I have no doubt Peter Bell would have given a more accurate description of the primrose than would Wordsworth.

The arithmetician who prides himself on the accuracy he imparts to his pupils by making them work out columns of painful problems in the compound rule of three is often sadly at fault. He certainly encourages the habit of accuracy in dealing with mere figures, but for ludicrous inaccuracy of thought commend me above all things to a page of an ordinary text-book filled with problems in the compound rule of three!

Certain of the sciences, too, are supposed to serve as specially good instruments in cultivating the habit of keen observation. But it is notorious that men trained on those sciences as material become keen observers only in their own science, or in closely allied sciences. In the ordinary affairs of life it is not precisely keen observation that distinguishes the savant.

Accuracy, caution, industry, observation, indeed, differ in no way from the faculties against which Herbart made his attack. Like the faculties, the virtues have been hypnotized into independent entities that make up a moral mythology as misleading as the intellectual one that Locke left for Herbart to demolish. In morals, as in knowledge, there are the ideas and the mind; morality consists in their interaction, and the ideas count for as much in the process as does the mind itself.

For we cannot be virtuous in vacuo; virtue in general does not exist. All that we can hope to attain is the habit of doing virtuous things. Is this not a falling back upon the Aristotelian bundle? It is; yet it carries us beyond Aristotle, and sets us on the hunt for a cord to bind our bundle. We cannot have even a bundle of habits unless we have established some connection among the individual habits; unless we have brought them under some unifying category.

So far we have reached only individual acts of virtue. We admit

the existence of honest men and honest acts. Why should we question the existence of honesty? Are we ever honest in the abstract, honest in general, without being honest about any special thing? A man whose honesty is bounded by an income-tax return does many honest things in his life. Is he honest? Many men who do not hesitate in the least about condemning a fraudulent tax return are not at all clear about the necessity of observing a railway company's by-law about the transferring of tickets. To take an illustration from a more purely professional quarter, it is well known that a schoolboy's honesty is regulated not by reference to absolute truth or proprietorship, but to truth or proprietorship under certain definite conditions. A boy who will not swerve a hair's breadth from the truth to save himself from the most serious of scrapes will cheerfully lie to screen a friend. A boy who would blush to the roots of his hair at the mere thought of purloining an apple from a fruit stall will take a certain amount of pride in robbing an orchard.

There is nothing more difficult than to convince a boy that the two cases are parallel—if, indeed, they are parallel.

In fact, we have here in moral training the same error against which the newer educationists are striving in intellectual education. The incidence is in the wrong place—on the apples instead of on the boy. Sins have been classified and carefully studied, whereas the sinner is the really interesting subject. Whether we take the resonant, "Some sins in themselves and by reason of several aggravations are more heinous in the sight of God than others," or the halting nursery rhyme,

"It is a sin to steal a pin, Much more to steal a greater thing,"

we find the same neglect of the subjective element. To be sure, the objective conditions must be carefully considered, and it is one of my main contentions that the concrete nature of all material for moral treatment is not sufficiently recognized. What I object to is the attempt to impose an external harmony upon the manifold of experience, and then make the ego fit into the harmony. In the process ego and environment are of equal value, and the only harmony that can be attained must be such as will reconcile the differences between them from the standpoint of a higher unity.

The ordinary method of moral training proceeds on quite other lines. General precepts are gathered from the experience of men, and are inculcated in moral lessons that are moral lessons and nothing more. Against moral precepts I have nothing to say, any more than I have against the laws of motion or the rules of syntax. As to their place in the school curriculum, that is a different matter. Those who adopt the old-fashioned didactic method in morals are making the same mistake against which the whole educational world is now up in arms. They are giving rules to those who have not learnt the need for them; they are giving generalizations to those who have not earned them. It is only after experience in his own person, or in that of others with whom he is brought directly or indirectly into contact, has taught him the lesson that a boy knows the meaning of the saying, Honesty is the best policy, though his copy book may have told him so years before.

Moral didactics are only of service when the conclusions they set forth are sufficiently wide to meet all cases. Yet by their very generality they seem to lose their usefulness. Most young folks resemble the rich young man—they love definite rules—though, like him, they may hesitate to obey them. Yet a complete list of rules is an impossibility. Even had Escobar succeeded in making an exhaustive list of all the possible cases of conscience, his success in this would only have made more conspicuous his failure in giving any real aid to his readers. A universe in which every action can be reduced to rule is not an organism, but a machine—and a machine cannot be treated under moral categories.

Yet the aim of all moral training is to enable the pupil so to generalize the results of his experience as to make for himself rules of conduct for future guidance. Even the teaching of example falls under this limitation. However clearly the pupil may remember how his master acted under certain circumstances, he can only judge how that master would act under new and unfamiliar circumstances by a process of generalization. No one life, however perfect, can include all possible cases; so example, whether in literature or in life, must be generalized into precept.

In this work of generalization there is an obvious need of some standard of morality, some criterion of right and wrong. To set up a standard with some degree of reasonableness is not perhaps very difficult; but to give the standard a practical application is matter of much greater moment. It is easy to say that no action is moral that in any way hinders the full and free development of the self; but such a test of an action only makes more manifest the need for a further test. Morality fails through lack of knowledge. If I but knew all that is necessary

for my full and free self-realization, I should never be in any doubt about my acts. But to attain this knowledge I must exhaust the universe.

The Kantian test of universalizing an action seems somewhat more practicable, but, after all, does it not split upon the same rock? What, short of universal knowledge, can decide whether a given action will or will not tend to the good of the agent? We have nothing against the categorical imperative; we gladly accept it as a philosophical truth. But we require something more for our practical needs as teachers. We must, if the daring suggestion may be permitted, create a categorical imperative within each of our pupils.

The time is past when we could fall back upon the comfortable moral sense of the naturalists, or the crude conception of the conscience as an innate moral faculty. A conscience of some kind we must have, but it is not a gift, but a product. Conscience-building is the beginning and ending of moral training. This view is not of itself new, nor is it especially Herbartian. It is usually connected mainly with the names of Bain and Spencer. Yet those writers content themselves with the statement that the conscience merely reflects the social and ethical ideas of the society in which it is developed, while Herbart's system supplies a mechanism by which the conscience can be evolved out of the isolated ideas presented to the soul.

Let it be granted that the Herbartian does not pretend to understand the secret of the universe, he makes no claim to have mastered absolute morality. He contents himself with adopting the highest available morality, and seeks to show how that may be applied in education so as to give his pupils a satisfactory training in that morality.

All the ideas against which the soul reacts, whether similar, disparate, or contrary, combine with or arrest each other according to their nature in such a way as to produce more or less permanent combinations among themselves. In this process the soul reacts blindly according to the nature of the presented ideas.

The combination of the ideas therefore depends upon their own nature. The idea of hot cannot be combined with the idea of cola under any circumstances, so the question of morality cannot here emerge. But the idea of hot and the idea of ice, being disparate ideas, may be combined in the soul, though never combined in fact. The complex idea of hot-ice is then, in a sense, an immoral idea, since it

implies a discrepancy between the relations of the ideas and of the facts. To this class belong all the mistakes that arise in the minds of pupils in all their subjects. The bad teacher is continually building up series of immoral combinations which cannot fail to lead to more or less immoral acts, for which the master, not the child, is responsible. It is quite conceivable that a teacher could so combine ideas in the mind of a child as to render that child unfit to live in a given environment without serious danger.

Frequently the mere act of living prevents false combinations of ideas. No amount of assertion of combination will, after a little experience, convince a boy that ice can ever be hot. But there are many ideas which may be combined in the mind without affording any opportunity for outward tests. Most of the ideas that are usually known as moral come under this head. The idea of Sunday is usually combined with the ideas of peace and the services of the church, while it is treated as contrary to the ideas of tobogganing and merry-gorounds. When the combinations and oppositions are well made, the immorality of merry-go-rounds on Sunday is thoroughly established, while other minds, built up on different combinations, find the merrygo-rounds perfectly moral. The French peasant has as clear a conscience as the most consistent descendant of the Pilgrim Fathers, the Hottentot who takes his emeritus father and knocks him on the head under a tree sleeps as calmly at night as does the dutiful son at Boston who has just bought a substantial annuity for his aged parent. It surely goes without saying that neither Sunday breaking nor parricide is here defended. It is enough that conscience has been shown to correspond to a given morality, not to morality in general. We have a wider sweep than the Hottentot, and feel (at least the less scientific among us feel) that his action could not be universalized with satisfactory results. On the other hand, it must be clearly understood that this limitation of conscience in no way affects the doctrine that there is an absolute right and wrong. Here is no defense of a varying standard of the right. In judging a given action we must modify our condemnation by a consideration of the idea-combinations in the soul under discussion, but in seeking to teach right and wrong we must feel that every action is absolutely right or wrong, though our ignorance of the eternal verities prevents us from going beyond a relative judgment.

Conscience can never be raised much above the prevailing tone of

the society in which the pupil lives, for if the master makes ideal combinations of ideas the contradiction of external facts breaks them up.

In this view all education is moral education. The master spends all his time in forming combinations of ideas that correspond with the true nature of things, so far as known to him. So long as the pupil finds nothing in his surroundings to break up those combinations they remain stable, and the more frequently such combinations are repeated within the soul the more stable they become. Viewed from the too close standpoint of ordinary observation those combinations are of two kinds, which may be called natural and artificial, or necessary and contingent. It is with the latter kind that moral training is mainly concerned.

Take the case of the treatment of the aged. There is a necessary connection between old age and physical weakness. A perfectly stable connection is therefore established between those two ideas which nothing in nature disturbs. With this combination of ideas the teacher has little to do. He may find it necessary to call attention to the two ideas thus combined; he does not require to enforce in any way the combination. On the other hand the connection between the ideas of physical weakness and kindly consideration and help must be made by the educator. An ill-bred boy sees an old man's hat blown off into the mud. The man's age at once shows that he is helpless to run after the hat, and therefore this boy kicks it. In his mind the ideas of helplessness and wanton cruelty have formed a permanent combination. The well-trained boy forms his first combination exactly as his fellow. He sees that the old man cannot run after the hat, but his therefore introduces a new combination, for it leads to his picking up the hat and restoring it to the old man.

Even here, however, the combination of the ideas of weakness and of rendering help is not purely abstract. It takes color from the background. Cases occur in which the two ideas are dissociated. A boy who is being punished is weaker than the master who is punishing him, but in the mind of the well-trained boy the idea of this weakness does not combine with the idea of rendering any help to the culprit.

There is a certain analogy between the Herbartian psychology and the Lockian at this point. One of Locke's main difficulties was to account for the origin of ideas of reflection, having given only ideas of sensation. In the Herbartian psychology we begin with mere ideas of cognition, and from these we must pass to ideas that bear a moral

quality. But the Herbartian mechanism is capable of explaining the change. There is here none of that vagueness which marks Locke's passage from the clearly defined ideas of sensation to the essential but hard-to-originate ideas of reflection.

At this point it will be convenient—and honest—to admit frankly that Herbart himself left no room in his system for the transcendental freedom of the will, and there are those who do not see their way to accept his mechanism without giving up all hope of a real morality. But self-realization implies freedom, and we have sought to show that self-realization can be aided from without. The Herbartian mechanism, then, may be adopted as a means towards self-realization without sacrificing the independence of the pupil.

The interaction of soul and ideas produces certain combinations of ideas that have a tendency to permanency. Each idea in those masses of ideas has a definite place. But since the same idea has a place in many masses it must have some means of passing from the one to the other. The Herbartian ideas have two functions, the one passive, the other active. As passive they are mere presented ideas, as active they have acquired what may be called presentative activity. The teacher's function in moral training is to increase the representative activity of the proper ideas, at the proper times.

The only way in which two ideas can be brought into connection is by being presented to the soul at the same time. The teacher has thus within his power the formation of the combinations he thinks most desirable. By increasing the presentative activity of two ideas at the same time, he makes sure of their rising into the field of consciousness together, and as a result a combination is formed which can be made more or less permanent according to the number of times the combination is repeated. In this way moral actions gain an advantage over immoral. Fortunately there is an obverse to the unpleasant saying:

"How oft the sight of means to do ill deeds Makes ill deeds done."

If this association were the whole, then there could be no such thing as morality. So far we have accounted for only a repetition of good acts, the same good acts. How are we to generalize from those acts so as to get at morality? This is the crucial point. It is at a point corresponding to this that Locke leads us to understand that somehow or other the ideas of sensation roll about in the mind and pro-

duce ideas of reflection. Are we to say that the moral acts react upon one another, and somehow generate moral principles? The solution is suggested by the general method of Herbart rather than by anything definite that he has said on the subject. The generalizations that we wish to evolve from the particular moral acts are mere abstractions. How would it do to say plainly that there are no generalizations? Is it necessary that the soul should have a sort of misty general idea of virtue that becomes clear so soon as an act presents itself to be judged? Is not this moral conceptualism of the most rigid kind? That equilateral scalene-isosceles triangle round which the schoolmen used to enjoy themselves is no more ridiculous than this right-wrong-neutral action that is supposed to lurk in Protean obscurity within the soul, ready to actualize itself the moment it gets any encouragement.

In the Herbartian mechanism all the available ideas on a given subject are called up so soon as that subject is suggested, and they act according to the laws of their nature as modified by the combinations they have formed among themselves, this modification constituting the moral aspect of the result. In the case of an act of common everyday morality—paying one's debts, or passing the salt—the ideas really work automatically. We do not perform those common duties because we have laid up somewhere inside us certain faculties of salt-passing or debt-paying, but because, to give a literal application to a popular phrase, we are built that way.

When a new case occurs all the ideas involved at once begin to react upon each other according to the usual laws of fusion, complication, and arrest. In a well-regulated mind the ideas and combinations of a good moral tendency are numerous and well arranged into compact apperception masses. Whatever evil ideas or evil combinations are involved in the case are vigorously opposed by the dominant masses, and so are effectually arrested and driven under the threshold, while all the temporarily suppressed good ideas swarm into the field of consciousness by immediate recall. The resulting equilibrium is a moral state, which can be readily reproduced, and which forms a safe base of operation for any similar case with new elements. Moral progress thus becomes possible, and the whole presented content of the mind forms suitable material to further this progress.

The criticism of the absolute Herbartian position is that the mind or soul disappears altogether in the process.

The soul is nothing more than the battle ground of contending ideas.

The ideas arrange every-

thing among themselves; the soul is the mere magic-lantern screen upon which psychic phenomena are projected. When Herbart speaks of ideas acting upon one another he is guilty of as unwarrantable a hypostasis as is the faculty philosopher against whom he inveighs. It is the wearisome old story of that pendulum that will swing too far the other way. Moral development is possible only if ideas and the soul mutually react upon one another so as to produce an organism that works out its own development by generating and reconciling antagonisms.

If we desire to find the incidence of moral responsibility in the neo-Herbartian position, we must seek it in the growing point. The necessity that makes the soul react upon a given stimulus is not a mechanical necessity. It is a necessity determined by the nature of the soul. The soul counts for something in the development, and that something involves the responsibility that every moral system demands.

Coming now to the classification of the school studies as a moral organon, we are prepared to find that they do not all rank alike. From what has gone before, we are led to classify them on a basis of abstractness. The more abstract a subject the less its value in moral training. Mr. Spencer's law of parsimony as applied in this connection would lead us to expect that science, which he maintains is at the top both as to practical utility and value as a training, should prove the most valuable moral organon. Certain sciences do rank at the very top, but not merely as sciences, but because of the nature of the matter they treat of. We so far accept Mr. Spencer's position as to maintain that it is unnecessary to seek out special subjects on which to train the morals of our pupils. The subjects that lie in our hands are quite sufficient for the most exacting moralist. Yet all subjects are not of equal value. A rough classification might be:

- 1. Physical training, including not only drill, but such subjects as imply the training of voice or eye or ear merely as sense-organs.
- 2. Abstract subjects, including all the purely mechanical parts of an ordinary elementary education: mechanical reading, spelling, school (that is, rule-of-thumb) arithmetic, grammar, languages as such, mathematics and formal logic.
- 3. The applied sciences and the natural sciences, such as physics, botany, geology, physical geography.
 - 4. The humanistic studies, including all subjects that deal with

human relations, such as history, political geography, biography, art, poetry, religion.

Physical training takes an extremely high place among the subjects that aid in moral training, not merely because of that tiresome "healthy mind in the healthy body;" nor even of the well-known efficacy of athletics in working off dangerous superfluous energy, but from the psychological connection between the bearing of the body and the attitude of the mind. Thring's *Potency of Attitude* is a more or less pious opinion, but Professor James has raised this view to the dignity of a serious theory.

The moral value of the sense training is not so clear. There may be something in the fanciful argument in favor of the moral superiority of wind music as compared with string music, as set forth by Plato, but underlying his condemnation of the Ionian and Lydian music, as against the Phrygian and Dorian," there were probably other and more cogent reasons. Not the more ornate music itself was immoral (it is Addison, I think, who says that music is the one sensual indulgence that cannot be carried to excess), but what it implied as its accompaniment. Here, as elsewhere, the matter took color from the environment.

About the second class we have practically said already all that need be said, unless we are to go into details of individual subjects.

The third class have a higher moral value than the second, simply because the ideas involved bring the soul into contact with the environment at a greater number of different points. The greater our knowledge of facts drawn from the natural sciences, the greater our chance to get near to the center of the Lotzian labyrinth whence we may see the things of life in their true relations. Whose increaseth knowledge increaseth responsibility.

But even the natural sciences have a more directly moral side. It is always profitable to consider the lilies. In an organic universe one is prepared to find the same principles working throughout, and no one should be surprised to observe the reign of natural law in the spiritual world. Analogy is no doubt frequently overstrained, notably by Froebel. He finds a sermon in every block and stick and softened pea in his complicated apparatus. It is quite in keeping with our principles to admit that lessons may be read into physical facts in this way. Indeed this is moral training — this arrangement of facts in a

¹ Repub., III, 398.

moral setting. But it is to be remembered that we put the moral there; we do not find it. From the point of view of natural science the cricket is quite as moral as the ant that La Fontaine makes deliver such an excellent, if cold-blooded, sermon. The rat that destroys our grain is as moral a rat as the bee that makes our honey is a moral bee. Everything depends upon the point of view— our point of view. The stick insect, that escapes untimely death by simulating the twigs among which he conceals himself, is guilty of the most objectionable form of deception if we take the opinion of the hungry bird whom he disappoints. As disinterested on-lookers we may pity the bird, yet we cannot blame the insect. Direct moral applications of facts from this class of subject are always attended with an element of danger. The worm might have some criticism to offer on the popular argument in favor of early rising.

The fourth class of subjects opens out for us the legitimate field for direct moral training. Even here, however, analogy ranks very high. Every good example, to be fruitful, must lead to a moral precept which broadens out the individual action into a general principle. It is not, Go and do so-and-so, but, Go thou and do likewise. Not the mere action, but the action considered in its special environment. determines the moral force of example. When we find Froebel in his Mutter- und Koselieder pointing out the moral danger of playing at hide-and-seek with young children, we feel that he is unreasonable. No doubt the child will imitate the mother and will try to deceive, but can this be called a moral act in itself any more than learning to walk? Froebel does not discriminate among the elements that constitute morality. Deception, even intentional deception, is not necessarily immoral. If artists are not generally regarded as patterns of morality it is not because they try to deceive us into believing that their foregrounds are nearer than are their backgrounds. Deception is only raw material, and may be worked up to either moral or immoral issues.

If Froebel's principle were applied throughout, all teaching by means of bad examples would be discredited, and the Prodigal Son would have to take its place on the teacher's *Index Expurgatorius*. Not the action and not the setting, but the action in the setting making a concrete whole, a unity not absolutely complete, it is true, but complete within itself, must be taken as the unit in moral training. The more units of this kind that are formed by the teacher in the experience of the pupil, the easier it is for the masses in the pupil's mind to react upon new ideas presented to them, and so produce similar units.

To give point to the discussion the following list of positions is appended, as embodying the chief conclusions to which I have been led:

- 1. No school study is merely a means or an end; all school studies are both.
- 2. Accepting self-realization as the highest moral aim, moral training is still possible; and there is still a place for the teacher in the process without loss to the independence of the developing ego.
- 3. That the idealism on which Froebel founded his system forms a groundwork upon which the Herbartian mechanism may be consistently built up.
- 4. That the organon of moral training is the idea as found in life, and that while all ideas, as isolated ideas, are of equal moral value, i. c., of no moral value, their moral force increases directly as the number of combinations they form. Therefore the more concrete a school study is the greater its value as a moral organon.
- 5. That formal education is as impossible in moral as in intellectual matters, and the virtues have been hypostatized into a mythology in much the same way as the faculties have been.
- 6. That while the ultimate standard of morality is the Hegelian idea, the teacher must fall back upon the highest available standard, that is, the idea as it appears to him at his present stage of development.
- 7. The teacher's work in moral training consists practically in building up a conscience out of ideas supplied by the various school subjects.

SUPPLEMENT

TRAINING FOR CITIZENSHIP.

By E. J. JAMES, Ph.D., The University of Chicago.

In my opinion there is little to which anyone can object in the discussion of this subject by Professor Jenks in the paper which he has presented. The views of the writer are in substance so sound and healthful that they must command in general the assent of everyone who has thought about this particular problem.

I should be inclined, however, to go further than Professor Jenks in the direction of introducing positive instruction in our lower grades of schools, with the view of developing the attitude, the temper, and the expert knowledge which ought to characterize, if not all citizens, certainly the voting citizens of the modern free state.

If I understand Professor Jenks' position correctly, it is in substance that the education of the citizen is a highly complex resultant of all the forces at work at any given time and place to produce the concrete product to which we give a name, indicating that the person to whom it is given belongs to a particular time, place, and country. The education or training which the American Indian gives to his boy in the use of the bow and arrow, in swimming and running, in stealthily stalking his prey, whether man or beast, combined with the external influences of the conditions under which the Indian lives, along with the family and tribal relations which characterize his state of society, constitute, taken together, the entire education or training for citizenship in that particular type of human society. It was not the specific education which was given in the ancient Roman state in the way of instructing a youth as to the nature and functions and organization of the Roman state which made him a Roman, but it was the resultant of the countless

*Paper of Dr. J. W. Jenks on "Training for Citizenship," discussed at the Indianapolis meeting of the National Herbart Society, and contained in the Supplement to the Second Yearbook.

influences of family, social, commercial, industrial and political life which, working together, put that peculiar impress or seal upon the youth of that time and that country which distinguished him as a Roman from the citizens of every other country and society and time which preceded or which followed. I should agree, therefore, entirely with Professor Jenks, if I understand his position correctly, that it is not special and specific training in the so-called duties and privileges of citizenship in the modern state which constitutes the most important element in the preparation of the American citizen for the important duties which he is called upon to perform.

Perhaps we might even go further and say that if our school system from the primary through the university assigned no time and no place in its curriculum for the formal study of American institutions, for the examination or investigation of American government and politics, we should still have, in spite of that fact, in the other training which our schools give, in the training which the playground gives to our American boys, in the training which the church, as it is constituted in the United States, which social life, which industrial, commercial and professional life, which the serious vocation or callings which one is compelled to follow in our society in order to obtain a livelihood afford, in the newspapers and books and pamphlets and other literature which our society produces, in the political discussions and struggles which take place in our society, I say that in all these elements we do have at present and should have at all times a most important, indeed, I think I may say, the most important element in the training for citizenship.

But, after all due allowance has been made for this fact, after we concede the great value, indeed the indispensable value to this element in our training. I think we must also claim that there is a place in the so-called systematic or school training of our society for a more definite and special instruction, leading more immediately and directly to the preparation of the average person in our society for the duties and privileges of citizenship in this great republic.

Something is already done along this line in our present school, coilege, and university system, but I am convinced that something more can be done and something more must be done than at present, though I am free to confess that personally I am not in a position to indicate any definite plan for the enlargement of this instruction which is based upon actual experience as a teacher in the lower grades of our school system. I had the good fortune to attend in my earliest schooldays

for two or three years one of the best specimens of the kind of school known as the country ungraded school, and I think I may say in passing that, although I had the opportunity subsequently of attending some of the best schools of their kind, I have never attended any school which seemed to me to fulfill more adequately and completely the idea of a satisfactory school for the purposes and conditions peculiar to it than this country ungraded school. I had later the opportunity to complete the graded system of elementary schools characteristic of a small village, and subsequently the chance to complete the course of a classical high school in preparation for college. I taught for five years in a public high school of which I was also the principal, and for fourteen years past have been engaged in college and university instruction, during this latter period in the subjects which to my mind have a special relation or bearing upon this problem of training for citizenship. I am not altogether, therefore, without some experience which has a certain sort of relation to the problem in hand, and yet I do not at all feel convinced in my own mind as to what plan is feasible or desirable in the matter of formulating and expanding systematic school instruction directed toward specific training for citizenship.

I offer the following considerations, therefore, with considerable hesitation and reserve. The general propositions, however, which I advance are based upon what I conceive to be a careful analysis of the situation as it exists today in modern times, and especially in the United States of America.

I may formulate the conclusion to which I have come in the following three propositions:

I.

The subject-matter for specific training in citizenship, aside from that general training which is to be found in history, literature, and geography, as they are ordinarily conducted, is to be found within the domain of the so-called political and social sciences.

H.

Instruction in these subjects is destined to be carried down from the university through the college into the high schools and elementary schools of our educational system.

A. Because of their usefulness as disciplinary and formal elements of education, and because of their value as informational studies.

- B. Because of the growing importance of these subjects in the hierarchy of the sciences as indicated in,
- (a) The growing mass of scientific material accumulated by these subjects.
- (b) The increasing attention paid to these subjects in universities and colleges.

The development in this respect will be similar to that of the natural sciences.

- C. Because of the growing importance of these subjects to our modern civilization.
- (a) To society in general, which is becoming for the first time in history conscious of its own ends.
- (b) To our own country at the present time on account of the conditions of our political system which requires for its successful administration that every voting citizen shall be more or less an expert in the matter of governing.

III.

The burden is, therefore, upon us to devise means of utilizing this mass of educational material for the purposes which we have in mind. This is a task which to a large extent must be performed by those engaged in teaching in the elementary and secondary schools. The particular arrangement of the subjects will turn in the long run upon the development of the sciences themselves. In some of the grades it will be necessary simply to place a little different emphasis upon the materials of instruction already used. Instruction in history and geography and literature may be expanded and concentrated somewhat upon the economic, social, and political aspects of the development of the country.

In regard to the first proposition I do not think there is any large difference of opinion. The individual becomes a citizen by the fact that he is living in society and in the state and has become an element in the social and political organization of the community of which he is a part. His duties and privileges therefore grow out of this fact and exist indeed because of society and of the state. Now, his social and political relations are the very subject-matter of the so-called political and social sciences, which deal with these subjects as the material of their investigation. Of course that does not mean necessarily that we shall put into the primary grades a subject which we shall call politics,

and which we shall call economics, and which we shall call sociology any more than, because we desire the pupils in the primary school to begin to open their eyes to the facts of the great world of nature about them and because we desire to interest them in the countless phenomena of this external world in which they live, it is necessary to introduce formal studies to which we give the name of geology, mineralogy, biology, etc. The term "nature study," which is simple, intelligible, and comprehensive, and which may include all that is possible or feasible to utilize for the purposes of instruction in the lower schools gives us a hint of what may be accomplished under the head of "social study," if we choose to use such a term, or indeed of what may be done without the use of any term at all, to delimit the work in which we are engaged from other useful work in the schools. But from the point of view here represented, the study of society represents a line of work which is just as necessary for all grades of our schools as is the study of nature itself.

As to the second proposition, there will of course be a much greater difference of opinion. But it seems to me that a study of the present situation and a study of the nature of these subjects will reveal what are good grounds for the opinion that the second proposition is true. I say that these subjects of instruction must be carried down into the secondary and elementary schools and that for several different reasons. In the first place, because of their usefulness as disciplinary studies and as informational studies.

No one who has studied political economy as it is set forth in the great treatises on this subject can help realizing that the mastery of the line of argument adopted in economics must result in mental development as surely and as truly as does the mastery of propositions in geometry. No one can take the trouble to understand the celebrated proposition of John Stuart Mill that "a demand for commodities is not a demand for labor" without a feeling that he has made as definite and as distinct an advance in his power to grapple with abstruse questions as would have been occasioned by the mastery of a difficult proposition in Euclid. If the general public, if our clergymen and our newspaper writers had understood this proposition and what it means, a proposition which may almost be called the *pons asinorum* of economic students, we should certainly have been spared many of the elaborate and thoroughly misleading expositions by our newspapers and other so-called leaders of public thought upon the subject of the Bradley-

Martin ball. The notion that the expenditure of hundreds of thousands of dollars upon an evening's entertainment is productive expenditure of wealth would not commend itself to anyone who understood the proposition referred to.

John Stuart Mill's theory of international trade; his presentation of the subject of rent or wages; and many other similar topics as discussed by him and subsequent writers offer an abundance of material for purely disciplinary or formal training; material which, while quite as difficult and obstinate as mathematics or logic, has the great advantage of appealing to some types of mind as of far more interest than mathematics, and is consequently for those particular persons a better material for formal or disciplinary training.

The same thing is true of politics in the form of constitutional law. No youth can master the line of reasoning pursued by the great jurists who have developed a theory of constitutional law based upon our constitutional system without feeling new virtue come into him, without experiencing a new sense of power, without undergoing a real process of development. Education has been defined by someone from one point of view to be a development of the power to make distinctions. And the power to understand and appreciate the distinctions which our jurists have drawn in the process of elaborating the set of constitutional principles upon which our system of state and federal government rests is one which must be the result of a severe formal training which itself is acquired by the process of developing this power.

Aside from this mental discipline, this formal training which in an eminent degree may be made the accompaniment of such studies, they have the additional value of imparting a deal of information relating to the conditions of life under which the modern citizen is placed which cannot be without its effect in interesting the individual in these social, political, and industrial problems which face our modern state. And if, with this formal training, we can secure this interest we shall have gone a long way toward laying the foundations for an intelligent and useful citizenship. The highest value of these subjects from this point of view, from the point of view of the formal or disciplinary side, is perhaps attainable only in our high schools, or in the upper grades of our high schools and of similar institutions. But the youth or maiden of sixteen or seventeen can understand and grapple with some of these problems which I have indicated in such a way as to reap very great benefit from the pursuit of these subjects.

There is another point of view, however, from which this subject may be considered, and which I think may throw some light upon the probable line of development. If we glance for a moment at the history of natural science in its relation to education and educational processes, we shall find what I think is a very similar development to that which is bound to occur in the field of the social and political sciences in their relation to education and educational processes. Modern science, and here I am speaking of natural science, is a development of the last four or five centuries. At first, generally speaking, and one may say that it has continued to be so in large measure down to the present time, natural science was looked upon not as a means of education, not as one of the instrumentalities which ought to be employed in elementary or secondary or even higher training, but as a subject for investigation or research on the part of a few men who stood perhaps entirely outside of all relation to education or its organization. Little by little, as the field of natural science expanded, as its results became larger and more significant, it began in some countries to play an important part in the higher grades of the educational scheme. The natural sciences were still looked upon, however, very largely as subjects of study for advanced students; for men who were going to make a profession of the study of natural science, or of the practice of some profession in which the knowledge of natural science would be useful. But as the natural sciences expanded their scope and enlarged their material they began to have a most profound effect upon the development of all other branches of human science; they began to have a reflex influence upon the development of history, of law as a science, of philology, of language, indeed one may say of philosophy itself. When this stage was reached it became evident that we had to do with a new subject of education, or at least with a subject of education in an entirely new relation. We began to recognize that there was something in natural science which could and ought to be utilized for the purpose of elementary training; and that training in science, so far from being relegated to post-university study, to private investigation and research, was to be exploited to the utmost in the university itself and in the college as well. And consequently we find that in the last generation the study of science has gone into every college course in the United States and into the corresponding courses of nearly all foreign schools.

But we were not satisfied with that. We soon saw that this same

material, owing to the relative position which it had come to occupy in the field of human science, owing to the peculiar relations of this subject-matter to every individual human being, could be still further utilized and exploited for educational purposes, and we have recently laid hold of this great department of natural science with a determination to utilize it to the fullest extent, not merely in secondary education, but in elementary education as well. This nature study before referred to is simply an attempt to utilize the subject-matter of this department of human knowledge for even the most elementary grades of our school system.

Now it seems to me that a very similar development is going to take place in the field of the political and social sciences. They are comparatively of recent date. They have received a new impulse and a new content from this very development of the natural sciences themselves. The face of the situation has been changed within a century. The work of Adam Smith and of his immediate followers, of John Stuart Mill, of Comte, and of Herbert Spencer have changed the relation of all these subjects in the general hierarchy of human science. The growing mass of material falling within these sciences, the increasing scope and function of this department of investigation and research, all point to such an important and permanent place in human science in general that it will hardly be possible to avoid utilizing this material and this subject-matter for purposes of education, not merely in our universities and colleges, but in the lower grades of our schools as well. That this line of development is already proceeding very rapidly I think will be seen by a mere study of the facts of the curricula of our schools. Political economy is barely a century old. It has won for itself a place in the curricula of every university in modern countries and in many of the colleges; indeed, in this country one may say that it is recognized in all our college curricula. This was accomplished even before the middle of the century, but the great period of development, the great period of expansion has been since 1870. The establishment of Cornell University in the latter part of the 60's, and of Johns Hopkins University in the middle of the 70's, indicated a new attitude, a new function, and a new sphere for this department of science. The establishment of the Wharton School of Finance and Economy in the University of Pennsylvania at Philadelphia, the establishment of the School of Political Science at Columbia College about the same time, and the rapid and sudden increase in facilities offered for the study of these subjects in nearly all other universities which began in the latter part of the 70's, marked the rise of a new department of university instruction. The establishment of Leland Stanford University and The University of Chicago in the early 90's served to emphasize the increasing expansion and the growing relative position of these subjects. Of some fifteen departments thus far organized with head professors at The University of Chicago, three fall within this general field. Now this expansion in the subjects in the universities has come about, not from any desire of the universities to favor this subject particularly, but it is a result of the expansion within the subjects themselves, an expansion in the subject-matter, and it has not remained without a very profound additional influence which has showed itself even within the short time since this development has taken place, an influence which, in my opinion, is bound to increase and grow as the years pass on.

The above considerations are based upon a study of the importance of these subjects in the general field of human science and the conviction that no great department of human science can be left entirely to one side unutilized for purposes of education as such. The study of man in society is as fundamental and permanent an object of interest as the study of nature around man, and just as our educationists have finally seized the material of natural science and utilized it for educational purposes, so they will surely seize the material of the political and social sciences and put it to the same use.

There is, however, if anything, a still more important consideration to be urged in this connection. It is believed that the subject-matter of these sciences is to be utilized for educational ends and purposes, because of the importance of the subject-matter itself to our modern society, and especially to our political and social life in the United States.

For the first time in all human history one may say that human society is beginning to come to a consciousness of itself. It is beginning to reflect upon its own origin, its present constitution, its future destiny; and it is beginning to set before itself ideals of human life toward which as a society it proposes to direct and train itself. We do not mean by this that there have not been in all ages and in all states of society and in all periods of human history individual men who have reflected upon these various topics in connection with the generation and the society in which they lived and moved. But it is not unfair or untrue to say that

in this generation and in this century the number of people who are reflecting upon such subjects, the proportion of society which is beginning to think about these things, is so enormously greater than at any previous period of the world's history that a new era in this respect has dawned upon the race. Now a society cannot undertake to control and shape its own constitution consciously, cannot undertake to set before itself distinctly high moral ideals toward which it is bound to strive, and in the struggle toward which it intends to utilize every power placed at its disposal by a knowledge of its own constitution and its own tendencies, without coming quickly to the consciousness that no reasonable policy can be based upon anything else than a sound and thorough knowledge of the nature, constitution, and principles underlying the development and growth of human society in general and of the particular type of human societies which is striving to accomplish these very ends. The result of this must be a new endeavor and a new determination to study and investigate the elements of social and political life, the underlying principles of all social organization which make up the subject-matter of these very political and social sciences which have been referred to before. The importance of these subjects, therefore, is bound to increase with every passing year. We begin to catch faint glimpses, faint ideas, of the lines along which the power of man over nature is to develop, of the ultimate victory of man over the powers of nature which have so long surrounded and enslaved him. We can hardly say that we have arrived so far today as to catch even the faintest glimpses, as to form even the faintest notion as to the manner in which the human being is to organize himself consciously, or, if you please, to be organized unconsciously, in human society in order to utilize for the welfare of the human race the results of human science. The study and investigation of these subjects is, therefore, fundamental for all social progress, and their importance is bound to increase and not to decrease, to wax and not to wane, to multiply and not to be divided.

But there is still another reason why these subjects have for us in the United States today a peculiar importance, another reason why they are bound to become of ever-growing magnitude in our society. We are trying today an entirely new experiment in human history. We are trying to govern a great and populous political community upon the theory and principle that every man, and perhaps before long every woman, is a political expert entitled to have an opinion upon all political questions, and upon all social and economic questions which may

become political—and in this age of the world there is scarcely any economic or social question which may not also become political. In doing this we are flying, not only in the face of all history, but also in the face of some of the most fundamental principles of our modern social and industrial organization itself. If there is any one principle which we may say characterizes the modern industrial system more than another it is that of division of labor; it is that of setting aside in our body economic and body industrial, either by force of law, or more commonly by force of circumstances, or of will of the individuals, I say it is the setting aside of certain people to perform exclusively certain functions, basing the prosperity of our body economic upon the final harmonious outworking of all these different occupations. We are not content with having a maker of boots, but we divide the business of making the boot into twenty-five, thirty, or forty different occupations, in each of which certain individuals occupy themselves, one may practically say, for their entire lives. We set aside the business of curing people by the administration of drugs to a peculiar class in the community known as physicians, and we prosecute anybody who undertakes to prescribe without having the recognition of the community which is involved in the right to practice medicine. We set aside certain people for the cultivation of the law and others for the cultivation of theology. We even divide up the business of making a pin into nobody knows how many distinct occupations, and do not expect that the person who knows one of these need necessarily know another.

And yet, in strange contrast to all this, we make the business of politics, the business of governing and ruling the state, the business of controlling by the power of the state the lines along which human society shall develop— I say we make this, or attempt to make this, the business of everybody. We undertake to say in theory, if not in fact, that one man's opinion upon these subjects is as good as another's; that the average man and woman in our society has sufficient knowledge, skill, and understanding, or is sufficiently under the dominion of people who have the knowledge, skill, and understanding to make it a practically safe thing to entrust the control of this most important of all business to the common man. No other country has ever attempted this, at least no other country which may be for an instant compared with the United States in population, wealth, and in the complexity of its social and industrial problems. No country in the ancient world ever tried such an experiment.

The Athenian tried the problem of such government on a small scale, but was careful to limit the number of people who might take part in this government in a very narrow way, feeling that no man could take part intelligently in governing who did not have an opportunity to prepare himself especially for this sort of work. The whole organization of the state was ultimately made to conform to the condition that the individual Athenian citizen should be put in a position to post himself upon political problems, upon political ideas, and upon political notions, upon political policies in such a way as to be entitled to an independent and intelligent judgment upon the same. To do this, however, it was seen that the great mass of people must be abject slaves to the few free citizens, for only in this way could the latter secure the requisite leisure and time to study and understand these grave political problems. The state went even further. Recognizing that no man could attend to his business and yet be entitled to that kind of an opinion which the theory of the Athenian state implied he must have unless he were a citizen of wealth and resources, the state provided that the citizens should be paid for the performance of their political duties. This was not as it is sometimes depicted a degeneration in the world of politics. It was an absolutely essential outgrowth of the whole theory and practice of the Athenian government.

The same thing was true of the Roman. It was a mere handful of people whose material and economic welfare was based upon the plundering of the rest of the world upon whose shoulders was placed the management of the Roman state. The average Roman could take part in the political management of the Roman Empire because and by virtue of the fact that he had at his disposal practically a sufficient number of slaves to support and take care of him while he gave his attention to politics.

The government of England today is in the hands of what may be called governing classes; people whom the entire masses of the community look up to as entitled par excellence, by their training, by their financial resources, by their hereditary connections, to the work of directing the political policy of the state.

Germany has been the scene of many struggles between the king on the one hand and the so-called representatives of the people on the other. The average man is still of the opinion that in the case of a dispute between the king and the commons, which to his mind is the case of a dispute between the king and his neighbor, Rhoderick Schmidt, whom he may have helped to elect to the House, and whom he knows to be a merchant or a farmer like unto himself—I say in case of such a dispute the average man sides with the king, because he says: "It is his business to govern; he knows more about this matter than my neighbor, good fellow though he is." In other words, nearly all countries are still conducting their government on the plan that there is a certain class in the community set apart by heredity, by wealth, by social position, to have the controlling and governing voice in shaping the political policy of the society.

We have thrown that theory overboard entirely. We have perhaps gone to the other extreme, and it looks sometimes as if we considered that intelligence, wealth, and social position were absolute disqualifications for the kind of service we expect of our representatives. At any rate we have put into our representative bodies in many instances poverty, ignorance, corruption, villainy and crime itself.

We are proceeding, then, in our government today upon the assumption that the average man is not only a patriot, is not only upright and honest, is not only desirous of doing the best he can, but that he is also an expert in the business of government, or at least in a position to pass upon the work and proposals of those who are actually doing the governing. Now I do not see how such a state of things can possibly exist and turn out well for our society unless, as a matter of fact, we do make the average man by his training—and by training I would include the whole scope of education, not merely the particular thing which I am talking about unless we make the average man by his training practically an expert in government, or at least put him in position to have an intelligent opinion upon the policies of experts whom we call to the work of governing.

Now I do not think that we shall be able to make the average man this kind of an expert or put him in the position to have this kind of an opinion upon the work of experts unless we take especial pains, in addition to the ordinary training already described, to give him some specific instruction in citizenship to qualify him for his duties.

There is one other thing to be said, and that I regard as very important. Men are apt to give their time and thought and feelings to things in which they become interested, about which they are concerned. It seems to me that one of the great justifications for the introduction of natural science into all grades of our schools is to be found in the desirability of interesting the average individual in our society in the

world of external phenomena about him. We ought to bring him to see in the flutter of every leaf upon a tree, in the flight of the passing bird, in the roar of the waves on the seashore, in the growth of the daisy at his feet, in the silent sweep of the stars above his head, a fact of interest and moment to him, the consideration of which will lift him out of himself and up into higher spheres of intellectual efforts and usefulness. I do not believe that he can get this interest, at least not on any large scale, unless our educational system is directed toward producing this interest in him, toward bringing this sort of thing in relation to the things in which he is interested, towards giving him an appreciation for these interesting and important natural phenomena.

The same thing is true of the phenomena of our social life. Our laws, our institutions, our economic and social and industrial relations are full of the most interesting phenomena, affording the most valuable material for thought and reflection and study, the consideration of which will lift the individual man and woman out of the narrow round of the routine duties characteristic of the ordinary life up into the larger sphere of communion with the great thoughts that have made our world for us, and with those larger thoughts which have made the universe in which we live. If we can get this interest for these things we shall find an increasing attention and an increasing devotion to these subjects on the part of every man and woman in our society, but to do that I think these subjects in some form must be brought to the attention of our children as systematically and as regularly as nature itself is brought to them in the best integration and by the best possible presentation which modern educational methods can give.

It is for these reasons that I think that the specific instruction in the subjects of the political and social sciences is bound to become a constituent of our elementary and secondary schools as well as our higher education. From this point on, however, I am, as I have already indicated above, somewhat uncertain as to the exact lines along which this can be carried out, or the exact methods by which it can be accomplished. But I am sure the burden is upon us as educators to solve this problem in a satisfactory way. It is a burden which is resting upon the conscience and thought of educators in all countries, and ought to rest with peculiar and pressing weight upon the intellect and conscience of all citizens of a free state.

The ultimate integration of these subjects and their correlation with other subjects of study in the curriculum will turn very largely

upon the ultimate development of these sciences themselves. There are conflicting tendencies at work within these subjects at present. Some of these tendencies are moving in economics, for example, in the direction of making this subject a mathematical or a natural science; others tending to hold it within the domain of the moral sciences. The effort is making to reduce politics to history, and a counter effort to reduce history to politics. I do not think that the arc of the circle is large enough at present to determine how it will be finally closed up, or whether it is a circle at all instead of an eclipse or a parabola, or a hyperbola. This, however, may fairly be deferred for the future. We have only at present to grapple with the sciences as they exist, and with these subjects of study as they are at present in their relation to existing subjects in the curriculum.

I am quite clear that in the high schools, especially in the upper grades, they ought to be differentiated and taught as independent subjects. In the lower grades they may probably be better associated with geography, with history, or with literature.

I do not believe that we need to teach patriotism in our schools today in the sense of trying to encourage a special, highly developed, morbid sense of devotion to the old flag, respectable and valuable and honorable as that feeling of devotion is and must ever remain. I do not think there has ever been any lack of devotion to the old flag. There has never been a time in our history when we could not get an army, and a very considerable army, to fight for any proposition which the government was willing to advance, whether good or bad. And we have seen lately in rather an alarming way the willingness and tendency of the country to follow any kind of a lead which would involve us in war, either with a great or a small nation. This kind of patriotism is, I think, sufficiently highly developed at present, and it will, at any rate in my opinion, take care of itself. But I do feel that the patriotism which will lead a citizen to perform his routine, everyday duties toward the community in which he lives, that patriotism which will make him feel it to be his duty to find out what his duty is by study and investigation and reflection and consideration, and then to do his duty with his whole soul, is the kind of patriotism which we certainly need to have more fully developed. This particular feeling is, of course, based largely on sentiment, and sentiments and emotions we may develop by literary study, or at least by the use of literature for this purpose. And it may be possible with the right sort of supplementary reading; it may be possible with the right sort of additional work in literature, in history, and in geography to serve every useful purpose connected with this instruction.

I leave the subject with this general question. Is it not possible for us to work out a syllabus of instruction in political and social science for our elementary and secondary schools, a syllabus which would indicate the topics which ought to be studied and considered, the order in which they ought to be considered, and the subjects in the present curriculum with which they may be brought into immediate and direct association, a syllabus which would serve as a sort of guide to the teachers in our schools, for after all is said and done. this problem on one side is certainly a problem of the education of the teacher. What can we do to get the teacher more fully aroused? What can we do to get the teacher to understand more fully the problem we have before us, the subject-matter from which we are to draw our material, and the means by which this subject-matter may be made available for the purpose in hand. We have syllabi for the instruction in English, for the instruction in mathematics, in our schools, indicating exactly what things ought to be considered and what ground ought to be covered within the limits of the school course. Why can we not do the same thing for the political and social sciences, from which the material for this particular instruction is to be drawn?

TRAINING FOR CITIZENSHIP.

By C. C. VAN LIEW, Ph.D., Illinois State Normal University.

1. How to prepare children for better, more perfect and efficient participation in the social life of the future than characterizes the adult of today in his attitude toward present social needs seems to me to be at once an important and difficult problem. Possibly we may well pause to consider some of the difficulties involved in a practical solution of the problem. As a result of certain investigations on the social attitude of children, Earl Barnes tells us (Add. and Proc. N. E. A., 1896) that the pupil as a social factor is "a conserver of forms in details touching his own life; and of beliefs in fields where he has no experience, providing these beliefs can be harmonized with the logical tendencies of his mind." I think it accords with the common experience of most of us that children are conservative toward institutions and customs that must be to them more or less matters of authority. Indeed, it is hard for one to see what motive or stimulus they could have for being otherwise. There is so much that is passively habitual and quite unquestioned in our environment, which we grow up into as a matter of course without reflection and without the mental disturbance of its contrast with something better, that it seldom occurs even to the adult, far less to the child, to question it. The child is conservative and partial toward these customary and unquestioned phases of his environment because he imitates the attitude of those in authority above him. Because of this attitude of the child toward the institutions of his elders, social usages, good or bad, tend to be perpetuated in the old traditional forms.

Those who are interested in improving social and civic conditions realize how difficult it is to create a feeling of the real need of changes, because of the lack of desirable ideals, even in the minds of adults. They construct their ideals largely from the materials of their own experience; for this reason they are slow to grasp new ideals and to give them any greater refinement or strength of purpose than charac-

terized the old. We have grown up in filthy, unsanitary cities, until it is a question whether we know what a clean city is. For years we never reflected upon the subject; now that agitators have forced the subject to our attention, our reflections in all probability give but a meager content to the great question of city sanitation and cleaning. lack ideals of the right kind. The same is true of the pupil. grows up surrounded by the social environment our ideals have created. He is a daily witness of wretchedly kept, often filthy cities; he knows that laws exist which are not enforced, and is possibly taught to regard such a state of affairs as at times a positive virtue; he sees criminals arrested and released again as soon as the plaintiff's private grievance is satisfied; he knows of many men who refuse to prosecute offenders against the law either because they wrongly fear loss to their business or perchance to family honor, and he is often taught that this criminal leniency is at times a virtue; he knows that many men seldom vote, and possibly his own father, by example, if not by precept, places private gain before public good; in more than one village he may see some petty but vicious justice of the peace curry favor for the future by neglecting to collect the fines he imposes. These are a few of the common, yet unquestionably evil forces of the civic and social life in which the child grows up. Of many of them we have ourselves long been unconscious. We need to reflect upon them to determine their cause, to take steps toward readjusting ourselves socially so as to remove them.

In the same way the educator needs to lead the child to reflect upon much in his environment that has hitherto remained unquestioned, for the purpose of assisting him to establish civic and social ideals that surpass the old. But right here is the difficulty. It is this questioning of the old in many fields that becomes a matter of extreme delicacy to the teacher. Dr. Jenks calls for independence, tolerance, and impartiality in the treatment of all political, civic, and social questions in school. But there are parents, political parties, and social organizations that regard independence, tolerance, and impartiality on some questions as educationally quite undesirable, while the child early shows as the result of their authority a strong bias toward absolute intolerance on those questions.

The problem is one of practical bearings. The teacher must start out to secure that in her pupils which is but rarely found anywhere—the broad, impartial, independent mind on questions that must sooner

or later touch the private interests, feelings, and beliefs of others. How shall it be done? The problem demands tact in the method of approach and a nicety of control. It is my purpose merely to raise the practical question.

2. May not the proper presentation of some subjects that are not essentially political, and that are already in the common-school curriculum, be made to subserve the ends of training for citizenship?

The sciences of civics, economics, and sociology are teaching us the true significance of much of the knowledge long dealt with by the old subjects of the common-school curriculum. This is true, because these sciences deal preëminently with the practical relations of man to all the forces of nature and society. Their generalizations may be drawn, in fact, from the very data with which geography, history, literature, and science deal. Indeed, some familiarity with the current thoughts of sociology and economics should react favorably upon those who select the subject for text-books in history or geography, as well as upon the teacher who presents these subjects. The method of the latter in teaching geography, for example, should be pointed by the fact that she is dealing with ideas that must ultimately make for the intelligent insight of the child into the economic and social forces that exist about him. The "division of labor," "interdependence of occupations," "law of supply and demand," "competition and cooperation," "civic obligations," are but a few of the general notions that should be yielded by the facts of literature, history, science, and geography. The thing that the knowledge of schools too often lacks is efficiency. Our very subject, Training for Citizenship, is evidence of this inefficiency. If we would remove the difficulty, should we not then bring these subjects that we teach into more vital touch with the child's own life and environment by giving them their true social, economic, and civic significance? Should we rest content with the geographical law, as such; with the American poet merely as a literary individual, or with history as a string of human events? or should we see in the first a law grandly affecting human industrial and economic relations; in the second, one who stimulates pride in national achievements and puts content into our patriotism; in the third, the growth of great national and social ideals? I believe we train for citizenship wherever we render the knowledge of the schools, in whatever branch, more efficient in practical activity, wherever we carry it on to its logical inductions along the lines of practical civics, economics, and social

science. If we are not training for citizenship as we should, as a partial cause for this deficiency we are not teaching a good many subjects as we should.

3. Dr. Jenks' paper calls for the inductive method in the treatment of those subjects that make for citizenship. His thought strikes, of course, the keynote that must determine the teacher's method in all branches, with the possible exception, at times, of mathematics. Yet the emphasis here is well taken, both because there is the constant tendency in teaching to deal with the remote, with the unseen forces of government and society, and to ignore the forces that directly touch the child, and because the lack of a consistent, tolerant method of induction is one of the sources of intolerance, partiality, and irresponsibility in pupils. Induction as a pedagogical method of procedure is only just beginning to be understood. Its practice is comparatively rare. Let us inquire what it implies, e. g., in the subjects of history and geography.

History should be one of our great sources for political and social thought. Yet it is rare that instruction in history does not leave the pupil's thought with strong intolerant and partial bias. Convictions are never objectionable; but the non-receptive, stubborn attitude of mind to certain classes of ideas is always a misfortune. Yet what single text-book in history does not supply the child with ready-made judgments upon all the issues of the past? The text-book has its place, but its exclusive use, or the exclusive use of a single text-book of the average type, thwarts the spirit of investigation and smothers the tendency toward tolerance of both sides of a question.

What does the inductive method imply in the teaching of history? It does not content itself with the narration of a chronological series of events; it does not (as a method of teaching) content itself with authority merely as the criterion of the right and wrong of past issues. It excludes such conceptions as these entirely. When made the exclusive guiding principles of method, they operate against the cultivation of those habits of mind in dealing with historical problems that Dr. Jenks rightly regards as desirable in the well-trained citizen. The inductive method, consistently applied, calls first for the impartial investigation of all sides of a problem. Such investigations cannot be carried on without some reference to original sources of history. The credit is due, probably, to Mary Sheldon Barnes more than to anyone else, of having demonstrated the feasibility of a consistent inductive

method in history, and of having brought its effects into text-books. To her work we owe our present vision of what it is possible for the inductive method to accomplish. Again, it is now possible to secure in cheap but durable form some of the most essential original sources. It will not be long before the entire historical field that becomes a subject of schoolroom investigation can be approached in this way. It is hardly necessary to add that we are here speaking of induction as a pedagogical, not as a scientific method. The inductive method is always looking, in history, to the growth of great national and social ideas; its outcome is a system of general historical notions. This outcome cannot best be reached by the old grouping of historical facts in unbroken chronological order or in arbitrary groups, such as are furnished by administrations, reigns, etc. We need to review the subject-matter of history in the light of its great movements. The ultimate purpose of the student of history is a grasp of great historical ideas in their growth and significance. To this end historical facts should be grouped so as to reveal the great movements in human thought and action.

In the same way the inductive method should exert its logical effect upon the method of approach in geography. Dr. Jenks has already hinted at the possibility and benefits of causing children to reflect upon the character of their civic environment and to take some pride in its improvement. Nowhere is this possibility greater than in the inductive pursuit of geography. Induction, as a method of teaching, requires first-hand contact with the facts of geography. Here we must draw upon the resources of the excursion. The child must visit the blacksmith, the wagon-maker, the merchant, the farmer; he must at first hand note their position, functions, and mutual dependence in society. He must trace their dependence upon natural resources and find herein the motive for his studies in physiography and geology. Undoubtedly the great motive for the study of geography in the common schools is to be found in the light it sheds upon the forces and structure of human society and human institutions. But in order to understand adequately the great principles of human activity the child must be led to the examination of the civic, social, and industrial data of his immediate environment.

4. In conclusion I wish to direct attention to the thought that the spirit in which the school, as a social community, is organized, and this organization maintained, may contribute greatly to the cultivation

of those habits that make for good citizenship. Socially, the child cannot, at first, be a complete democrat, for democracy always means greater insight than the young child possesses. But the school can always be making for intelligent democracy. Some of its laws must be accepted on authority, yet it affords abundant opportunity for bringing out the thought that certain laws and regulations are necessary merely to insure the possibility of social living. It can make the fitness of these regulations apparent to childhood. There are countless opportunities in the schoolroom for the exercise of the spirit of cooperation, and the care of the school (as public) property brings the child at once in vital contact with his own civil responsibilities. These are but a few of the fields open to the teacher, in which his pupils may be led to the cultivation of habits that make for good citizenship. Indeed, every opportunity for the child to act that touches his own social, civic, or national relations, may be utilized to this end. It is at this point that school celebrations receive their greatest significance. The question may fairly be raised, however, in how far mimic civil institutions, that in nowise touch the vital relations either of the child himself or of his parents or comrades to real society, can really be regarded as of value in the training for citizenship.

REMARKS.

Professor Jenes.—I should like to make a suggestion in addition to one of the minor points of the paper. The objection is made that it is hardly possible to have the fullest training for citizenship, because our people are not tolerant in the discussion of vital political questions. This difficulty exists because the teachers themselves do not have the impartial habit. We cannot overcome the difficulty until the teachers themselves can discuss political questions impartially; but there are two methods for the teacher: First, to be generous, so that the pupil feels that the teacher will entertain opinions different from his own. Second, questions may be taken up along lines slightly different from the issues of the day. If the teacher cannot discuss the currency and tariff without offense, let him take some other questions.

This lack of impartiality, too, has become more general from the fact that many of our college professors have erred in discussing these questions from partisan standpoints. So far as my own knowledge of

the last campaign goes, some of the most partisan discussions came from the professors of political economy in our most prominent institutions.

Still further, when we speak of the impartial habit we must remember that habit is a matter of very slow growth, though impartiality is partly a matter also of temperament.

(After questions by Dr. Van Liew.)

The teacher of the lower grades is best fitted to answer these questions. So far as I myself dare express a judgment, it would be to this effect: Teachers should be extremely careful to present these subjects in their proper order. For example, there would be no use in discussing in the lower grades the "Nature of the Social Mind." But, if a child is living in a dark, filthy alley, it is possible for the teacher to put into his mind the idea that the alley need not have the wretched litter of the gutter. Even the schoolroom itself is a place free from banana and orange peel and all such litter. The smallest child can be made to understand the difference between that place and his home, and to wish to improve his home.

Light can be given to little children also on some of these questions that puzzle even college students. My little boy seven years old asked me a question about taxation the other day which convinced me that he could understand the nature of taxation.

It is true, of course, that we should beware of saying too much that would reflect on the opinions of the boy's parents. There is enough material, however, that would not do harm in this way.

As to the opinion of parents that their children should be partisan in opinion in order that they may be active and do something, I believe there is merit in the suggestion. A friend lately said of one of my colleagues: "There is one thing I like about this professor; whatever he undertakes he puts his heart into. It is better for him to do this even if he does make mistakes sometimes." We ought not to have too much of the indecisive, Hamlet frame of mind.

DR. FRANK McMurry.— I am interested to know what is the chief lack. The paper has suggested two points, and as I see it there are mainly two points before us. It is stated by the leader that some of our professors of political science are dogmatic. How shall we overcome the dogmatic tendency? How shall we send forth boys anxious to know more? If the right habit of mind is derived primarily from

method of teaching, then we want to look to that first of all. The author of the paper shows that text-books are dangerous. He says, "Do not tell the child what the conclusion should be." I left the high school wholly unfitted to reason. Shall reason be made especially prominent? My question is whether Professor Jenks thinks that method is the first remedy, and whether text-books can be followed without failing to cultivate the pupil's judgment.

Professor Jenks.—The chief influence upon the pupils is the personality of the teacher. We teachers should first get ourselves into the right mental attitude. Aside from the fact that the spirit of the teacher generally determines results, I should say that the method of teaching is important. If we rely upon the text-book, the text-book becomes dangerous. From my own experience I should say that the simplest, easiest, and most direct way is to put into the hands of the pupils a text-book or some other outline of the subject to be considered. But this text or outline is not to be of chief importance in the class. Again, I am strongly opposed to the lecture system in the class except with the most advanced students, who have formed the habit of making judgments for themselves. Text-books are dangerous, but are exceedingly convenient, if wisely used.

PROFESSOR GALBREATH .- Referring to the training of the teacher and a point which preceded it, I want to say one or two words. The fundamental lack is the training of teachers. I do not agree that the question is fundamentally one of method or of mental habit. Those questions are essential and important, but not fundamental. A man can be trained to be very unbiased in judgment in some fields, but remain very thoroughly biased in certain other fields. When so trained in one field that we can reserve judgment, it may help us in another. History should be so taught as to reveal the civic idea, and to cultivate the inductive spirit. To secure the proper elements of training, let us return now to the training of the teacher. In the first instance, the teacher does not have the training in history or geography that reveals the life of the citizen. The matters studied in connection with our government are at Washington or the state capital, or the subject may be given in general. My thought is this, that in the normal schools we need a sociology pure and simple that would reveal to the teacher a system of ideas which we denominate sociology, which will help her to the civic elements in the community to which the child is related. She is not to teach political economy, she is to teach literature, geography, and history to the children. She must be able to set forth the civic idea in these subjects.

SUPERINTENDENT SLAUSON.—Something has been said about bringing these subjects down into the secondary or elementary schools. So far as I know, the gentlemen have not agreed upon anything that can be brought down. So long as probably 90 per cent. of the teachers have no connection with the civic matters, what shall we do to move them to gain this knowledge, to study how to present it, to make use of it?

SUPERINTENDENT BRIGHT.—I rise to raise a question. I read the topic, "Training for Citizenship." That means something more than civics. The children that have been in school for a year have come into contact with two institutions, the family and the school. Perhaps the school introduces the child to the first consciousness of the institution. His training in the family is about as various as the number of families. Has not the training for citizenship about as much to do with the relation of parent to child as with any other relation?

Now I raise the question, if the child assumes the proper relations to the children in his home, to the people with whom he associates in school, is there much danger about the relations he is going to assume in the world at large? It seems to me that if the child is fair, if he is taught in school that he must act with fairness, he will, as a man or a woman, be fair to his fellows and to other citizens in the place where he resides. These children are to be young republicans. They come for their training into an institution that, in about nine cases out of ten, is run on the principles of an absolute monarchy. If they recognize the school as a republican form of government, should they not be allowed to understand why things are thus and so? This is republicanism. It seems to me that it is proper training for American citizens.

PROFESSOR JENKS.—It has certainly been my intention to convey the idea that has been suggested by Superintendent Bright. No person can be a good citizen unless he is good as a member of his family, unless he is a good neighbor. Children should have the right ideas about family

and school; and then they can be taught that the school is connected with public affairs. Their relations of "Charity towards each other" should be extended to "Charity to all."

A word for the questions of Superintendent Slauson. It did not seem wise to try to lay down in the paper a specific course for the lower grades. If these ideas regarding the nature of citizenship are agreed upon, then the superintendents are far better prepared to formulate the details of such a course than I am.

It may be that there are many teachers who have not had special training along these lines who have, nevertheless, a great interest in these subjects. An attempt is to be made to have the teaching of citizenship systematically tested in several places so as to gain experience along this line.

As to the statement that 90 per cent, of the teachers have no connection with civic affairs, I suppose that means no right to vote. The essential thing regarding the suffrage is that the voter shall have an independent personality, and women have that as much as do men. I would like to see women vote. As our ideas of the progress of civilization and of human nature are changing, we shall all come to believe that women should vote. But even it they do not vote, they have civic relations and civic duties. Why, teachers who draw salaries have a very vital legal connection with public affairs; they are paid by the public. If they have right conceptions regarding their civic duties, they will be glad to train good citizens. If they have the proper superintendent, they will be glad to interest themselves in this kind of knowledge. The superintendents can see to it that the teachers get the spirit very promptly.

MR. Bell: Do you say that we take pride in our prejudices? MR. JENKS: Yes. MR. Bell: I do not believe it. MR. JENKS: I suppose that Mr. Bell is as likely to be right as I am, although I cannot agree with him. At least, he has as good a right to his own opinion as I have to mine.

Mr. Galbreath thought that impartiality was dependent upon knowledge—that if a person knew one subject well, he would be impartial on that subject but bigoted on others. He believes that thorough knowledge is necessary to impartiality. I think that this mental habit of impartiality must be a conscious habit. If I find a person

differing from me in opinion, I naturally think he must be wrong; but if I realize that half the people think he is right, while half agree with me, I might readily question my judgment and strive to take also his point of view. If I form the habit of thinking that my opponents may be right, that will bring me into the habit of impartiality.

I believe, also, that there is danger that this habit of impartiality may become also a habit of inactivity, of withholding judgment so long that we shall not take an active part as citizens. This evil we should guard against. We should give such a vivid idea of civic duties to the student that he will feel that he must act, must settle the question before him on the knowledge that he has, and act.

If the importance of training for the life of the citizen is fully realized by the teacher, and if he gets a clear conception of the nature of the state and of its relations to the life of the individual citizen, he will approach his work from a new standpoint. Working from this standpoint, he will find that most of the studies in the school curriculum, especially history, literature, and geography, will gain a new content, and he will find in them much material for training children in the duties of citizens. Other special information of importance can readily be given in general exercises so commonly held in the schools.

It is very desirable that the suggestion made in the last paragraph of Professor James' paper be acted upon, and that public-school teachers of experience work out a syllabus to show better how our present school studies can be made to furnish this much-needed training, and what new information of special inportance can be supplied. Some excellent teachers are now working with success along this line, but the field has not been as yet systematically and thoroughly cultivated.

THE TEACHING OF ECONOMICS IN THE SECONDARY SCHOOLS.

By FRANK H. DIXON, Ph.D., University of Michigan.

THE designation, "people's college," gives expression to the fundamental purpose of the high school. Its primary function is training for citizenship. It only secondarily prepares young men and women for college. Insistence upon this idea entails a necessity for modification and betterment of high-school courses in several directions.

I have not the opportunity even to suggest ways in which the courses should be generally modified in order to meet the purpose for which these schools were established. This paper will be confined to the advocacy of a more extended and rational teaching of economics as an essential part of the high-school curriculum.

That the subject has been seriously neglected in the high schools of the country is shown by the fact that political economy is taught in only about one-twentieth of the schools that reported to the Committee of Ten, and that many schools which earlier included the study in their courses have found it unsatisfactory and have abandoned it. We seek naturally a reason for the neglect of a subject so essential to complete civic training. We find that a majority of those who teach it have no conception of its vital character, have had no training themselves in economic thinking, and are obliged therefore to limit the instruction to routine work with a text-book, assigning a daily stint of wearisome definitions and principles which convey no impression of the thoroughly practical character of the study. Is it any wonder that the subject is so often considered dry and uninteresting, and is it surprising that its principles are thought to be beyond the reach of high-school students?

The study must be made more practical, more real, more human. The most serious obstacle to the immediate realization of any plans for improvement is the lack of suitable instructors, and, to be sure,

were this obstacle removed, there would be no necessity for this paper at all. Were the high schools in the possession of well-equipped teachers, trained in habits of sound economic thinking, we could safely leave it to individual instructors to work out the problem in their own way. But with the teaching force in a majority of the high schools seriously inadequate, we cannot expect for many years to come that a study introduced into the high-school curriculum within recent years, the importance of which is not yet appreciated, shall secure special teachers for its work. As long as the impression prevails among the body of our citizens that a knowledge of economic principles and problems and sound reasoning upon them come by intuition, not by study, just so long must we expect to have the subject taught by persons with little training and with but a faint conception of the importance of their task.

A second obstacle, less serious in character, is the lack of proper guides to rational methods of teaching. Books of some sort are desirable, but the text-book plan is objectionable if by a text-book is meant a formal, systematic treatise upon the whole subject of political economy. The strongest argument against the text-book plan is that it has not stood the test of practical experience. In the nature of the case a text-book of a size convenient for high-school use can contain nothing but the barest statement of definitions and principles, and unless life is infused into these principles by the teacher the work is without result. The teacher accomplishes nothing unless he shakes himself free from the restraints of the text-book and makes the subject live by bringing it into relation with everyday affairs. A guide to the teacher and reference books of various kinds are valuable, but in the absence of these many books should be employed in class exercises rather than one. The high-school library plan, which has proved so successful in many lines, is the one to be adopted here.

The suggestion that formal text-books in political economy be abandoned prepares the way for the statement that teachers must not expect to present the science of political economy as a completed whole to the high-school student. He must content himself with instruction in the fundamental principles. He cannot hope to present economic questions in all their intricacies and complications. It is hardly to be expected that the young minds can grasp the more intricate problems, can make all modifications and concessions necessary to accuracy of statement in describing the working of economic

forces. They can grasp, however, the simpler problems, and obtain valuable training from their consideration, if the subject-matter is presented in a way that is interesting and stimulating.

We come then to consider the question of method. It is my feeling and experience that better results can be obtained through the teaching of more economic history and less economic theory. For a definition of economic history I am under obligations to Professor Ashley of Harvard University, who says: "Economic history asks what has been the material basis of social existence; how have the necessities and conveniences of human life been produced; by what organization has labor been provided and directed; how have the commodities thus produced been distributed; what have been the institutions resting on this direction and distribution; what changes have taken place in the methods of agriculture, of industry, of trade; can any intelligible development be traced; and if so has it been from worse to better?"

The value of historical training in general is so well recognized that it hardly needs defense in this connection. Its application to economics has met with more or less opposition, but an opposition which has been, on the whole, weak and illogical. Students must be made above all things to realize that economic conclusions are relative to given conditions; that they possess, therefore, only a hypothetical validity. They must be impressed with the fact that the problems upon which we as citizens are now engaged did not spring up suddenly out of nothing, but that they represent a stage in economic development; that they are an outgrowth of past conditions and past problems. They must be taught the proper point of view. They must learn to apply to all phenomena the principle of perspective and give to every fact its proper place and its just proportion. They cannot be taught properly to appreciate the present great struggle between capital and labor until they have learned something of the way in which private property came into existence and of the method by which the laborer was stripped of everything except property in himself as a result of the great inventions and of the industrial revolution of the last century.

Why then study industrial history? Because in the first place the study of the origin and growth of industrial society develops in the student discriminating judgment, broadens his point of view, and enlarges his sympathies. In the second place, industrial history is inti-

mately bound up with present-day problems. History is filled with the struggles of economic forces. One ideal has triumphed, another has met defeat. We have the practical illustration of the working of an economic force. Perhaps it is a warning. A fact, an event in history is often a more convincing argument than a book full of theories. In the third place, economic history can be studied systematically and logically. It is complete in itself and furnishes the student with something which is tangible and capable of being practically applied. He is studying the forces that are touching and influencing his everyday life.

Such a course should consist mainly in a study of English economic history as a basis for the investigation of our own development. It should include a study of primitive industrial conditions in England before the Norman Conquest, followed by a consideration of the manorial system, the growth of towns, the development of a national economic life, the evolution of commerce, the economic misdeeds of Henry VIII, and the economic changes of the sixteenth century, problems of money, poor relief, and the like; a history of the changes in methods of agriculture, the great inventions and the industrial revolution of the last century, the factory acts, the history of trade unionism, and the various problems that have troubled English statesmen during the present century. This should be followed by a consideration of the economic history of our own country in its various phases.

I recognize that the teaching of economic history in advance of economic theory is asserted by many to be criminal pedagogics. Without entering into a discussion of this much mooted, but far from settled question, it is sufficient here to say that the proposed study of economic history does not contemplate an abandonment of the study of theory, but rather a combined study of the two, the history to be illustrative of the theory, the theory to be evolved from the history. The history, then, should be so handled as at the same time to instruct the students in the important doctrines of the science. I feel confident that students will become more genuinely interested in the subject and will grasp the principles more readily when they are illustrated by the history at every step. Beginning with economic conditions under the manorial system, and tracing the history through the development of markets and fairs to the appearance of towns and the evolution of a national economic life, the student learns naturally the principles of exchange; the transformation from a system of barter to a money economy; he observes

how this exchange system becomes steadily more complicated and he comes finally to a consideration of the principles underlying international trade. The history of the great Italian banking houses, the Bank of Amsterdam, and the Bank of England gives him an insight into the functions of a bank and the principles underlying the banking system; he compares them with modern banks and their methods. The debasement of the coinage by Henry VIII and other monarchs, the influx of the precious metals into England after the discovery of America, present to him in simple form the problem of prices; he has practical illustration of the working of Gresham's law. With the industrial revolution of the last century he gains an appreciation of the function and power of capital, of the natural way in which our labor problem has arisen. He sees the meaning of improper distribution, which forms the burden of the socialistic argument against capital.

In the economic history of our own country the student again finds fundamental economic principles in practical operation. A study of our tariff history gives opportunity to investigate the laws of value, the conditions of production, international trade. The development of the transportation industry illustrates the use of capital, the forms of its organization, and the effect of the corporate organization of industry upon the general question of distribution. We have an abundance of banking and monetary history to assist in the study of the principles of banking and exchange and a sufficiently diversified governmental policy to furnish plenty of data for the study of public finance in all its phases.

This plan is suggested to such high schools as are now giving courses in formal political economy, and is intended as a substitute for such courses.

For those schools which are at present teaching no economics whatever I would urge a greater attention to economic history in connection with instruction in political history, especially of England and the United States.

It is utterly wrong to treat history as though it were nothing but past politics, and to teach political history to the exclusion of other and perhaps more important phases. In a general study of English or American history that phase of the subject in a particular period should receive the most careful treatment which influences most widely the life and development of the people of that period. At one time it may be the purely political phase, at another the constitutional, at

another the industrial. The consideration of one phase assists the student to an understanding of other phases, and the study of history will yield the best results only when the various phases of a people's life and progress are given each their proper proportion of attention. A statement of the causes of the Hundred Years' War between France and England, for example, is not complete unless we take into account the commercial relations which existed at the time between England and Flanders. Wat Tyler's rebellion of 1381 is without significance unless we make a careful study of the life of the peasant class, and of the inroads made upon them by the Black Death. The industrial phase of the Tudor period demands careful attention. It is of the utmost importance in the history of the growth of the English people, and is a prerequisite to a comprehension of the constitutional changes of the seventeenth century. Again, in the history of the United States, the same principle holds true. One phase of the subject serves to elucidate another. We obtain, for example, an utterly erroneous conception of the slavery question, and of the attitude which the southern states assumed, if we do not consider the industrial condition of the southern states and the part which slavery played in their entire economic organization.

Such a plan of correlation has been followed by many high-school teachers, and has been found entirely practicable. If consistently followed it will give the student some insight into economic principles and some conception of the bearing of economic problems.

Having in mind the general plan which I have outlined, I sent circulars some weeks ago to the leading high schools of the Northwest.

I am in receipt of sixty-three replies from high schools in Michigan, Ohio, Wisconsin, Minnesota, Iowa, Illinois, Missouri, Nebraska, and Colorado. Political economy is taught as a separate subject in forty of these schools. Thirty-three schools favor more or less of a change to industrial history; fifteen are opposed to such a change. Ten schools are now teaching industrial history to a greater or less extent. The schools are practically unanimous in favor of correlating work in industrial history with that in the political history of England and the United States. But two replies were received vigorously defending the teaching of formal political economy in the high school, and these replies were from men who have had special training in economics, and who are perhaps justified in making the attempt to teach to a lim-

ited number of advanced students the science of political economy as a whole.

This investigation coincides in its results with that instituted by the Committee of Ten, and leads inevitably to the same conclusion. The impression with which I began the investigation has become a conviction that, under present conditions, the formal teaching of political economy in the high schools should be abandoned, and I propose as a substitute the plan already presented to you.

I have not had it in mind to lay down a definite plan of study, but merely to suggest an outline to be worked out in detail by each instructor with such modifications as seem necessary to meet local conditions and requirements.

Let me add just a word in answer to objections that have been raised. Says one correspondent, "The introduction of a course in industrial history will add one more subject to the already over-crowded high-school course." I desire to call your attention to the fact that this plan does not demand one moment of additional time from the high schools. Where political economy is now taught, industrial history is to take its place. Where political economy is not taught, industrial history is to be treated only in connection with political history and is to supersede some of the less important matter to which attention is now devoted.

Says another, "The plan of work is too difficult for high-school students, and the reference books which are given in connection with this paper for high-school reference libraries are too advanced for the grade of students under consideration." This must of course remain somewhat a matter of opinion until it has been definitely settled by experience. However it is my firm conviction that any student who is fitted to take up history in a practical and sensible manner can, under proper guidance, grasp the economic principles which the history illustrates, and is in a position to reap the benefits which result from such a study.

Says another, "But we have not the teachers fitted to carry out successfully such a plan." This is a real difficulty and one which constantly confronts those interested in the advancement of historical and economic studies in the secondary schools, and yet I feel that the average teacher in the high school is better prepared to carry out this plan than to attempt a presentation of political economy as a formal science.

To sum up, industrial history as here proposed offers decided advantages for the high-school student over the formal teaching of political economy.

It develops a discriminating judgment, an ability to distinguish the fleeting and the temporary from the permanent forces which determine the character of our civilization. The student has learned to look at the problems critically and to be slow to accept propositions which have not been satisfactorily demonstrated. He has obtained a wide knowledge of economic problems, a knowledge which he can apply to the solution of questions with which he is brought daily into contact.

But of far greater importance than this, he has acquired an attitude of mind, a historical-mindedness which is absolutely essential to the proper performance of his duties as a citizen. The object of the study of economics in the high school should not be primarily to acquire facts. It is not necessary that the student should have economic formulas and principles at his tongue's end. Such catch-words and rules of thumb are apt to prove misleading if they are not supported by some wider knowledge of economic development. It is absolutely essential that students should have such a conception of the evolution of economic society as to produce in them a conservatism, a judicial tolerance, a sense of personal responsibility, and hence a saner and calmer treatment of economic questions. It may not be possible, as many insist, to use history directly in the solution of our present-day questions. Conditions change and a plan which was practicable at an earlier stage of economic development may be of no value now. But the study of economics in its historical development does give that impartiality of judgment and that respect for the opinions of others which is a prerequisite to the solution of the troublesome questions now confronting us. Without this the classes can never be brought together and the vital problems which threaten the very existence of the republic can never be solved.

I submit these suggestions, therefore, in the hope of stimulating the study of economics among young men and women, that the rising generation may approach these great industrial questions with a zeal for the truth and in that spirit of charity and liberality which springs from a broad conception of economic development.

Following is a list of books in economic history which should be found in a high-school reference library. I should be glad to make this list more complete and detailed upon the request of any teacher.

ENGLISH AND GENERAL.

Ashlev.—English Industrial History, 2 vols. [Putnams, 1892, 1893.]

CUNNINGHAM.—Growth of English Industry and Commerce.
[Cambridge University Press, 1890.] Outlines of English Industrial
History. [Macmillan, 1895.]

GIBBINS.— Industrial History of England. [Methuen & Co., London, 1895.] Industrial England, Historical Outlines. [Methuen & Co., 1897.]

THOROLD ROGERS.—Six Centuries of Work and Wages. [Putnams, 1884.] Economic Interpretation of History. [Putnams, 1888.] Industrial and Commercial History of England. [Putnams, 1892.]

HENRY DVER .- Evolution of Industry. [Macmillan, 1895.]

GROSS.—The Gild Merchant, 2 vols. [Clarendon Press, Oxford, 1800.]

SCHMOLLER.— The Mercantile System. [Economic Classics Series.—Macmillan, 1896.]

TOYNBEE .- Industrial Revolution. [Rivingtons, 1884.]

RAND.— Economic History since 1768. [Waterman & Amee, Cambridge, Mass., 1888.]

GARNIER.—History of the English Landed Interest. [Sonnen-schein & Co., 1892.]

BRODRICK.—English Land and English Landlords. [Cassell, Galpin & Co., 1881.]

Howell.—Conflict of Capital and Labor. [Chatto & Windus, London, 1878.]

FOWLE. The Poor Law. [Macmillan, 1881.]

WEBB.—History of Trade-Unionism. [Longmans, 1894.] IRVONS.—State in Relation to Labor. [Macmillan, 1882.]

AMERICAN.

BOLLES.—Industrial History of the United States. [Norwich, Conn., 1881.]

WRIGHT.—Industrial History of the United States. [Flood & Vincent, 1895.]

Lalor.—Cyclopædia of Political Science. [Rand, McNally & Co., 1882.]

Візнор.—History of Manufactures, 2 vols. [Young & Co., Philadelphia, 1864.]

Reports of the United States Department of Labor.

WEEDEN.—Economic and Social History of New England. [Houghton, Mifflin & Co., 1891.]

ELY.—Labor Movement in America. [Crowell & Co., 1886.]

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THE ELEMENTARY SCHOOLS AND CIVIC EDUCATION.

By C. A. McMurry, Pa.D., The University of Chicago.

Thoroughly educated people often seem as partisan and one-sided as the ignorant and illiterate. The tolerant, fair-minded, judicial spirit is a difficult acquirement even in an educated man. In fact a good part of education is directly opposed to it. Most of us, so far as we are educated, are trained to one-sided views, and, what is worse, to prejudiced feelings and attitudes of mind. In church, in politics, in historical views, in theories of education itself, in social problems, we have met everywhere partisan, often violently prejudiced, teachers. There is very little security against this sort of partisanship in society so long as the machinery of education moves in these deeply cut grooves. Education itself contributes its powerful, often unconscious, influence, to strengthen prejudiced attitudes of mind and habits of thinking. The higher institutions of learning, as well as the common schools, by cultivating the debating, contentious, partisan spirit, produce a result the opposite to that most needful in the discussion of public and social problems. Education, therefore, in the ordinary sense of the word, is but little protection against partisanship. It depends entirely upon what kind of education it is, whether it contributes to fair-mindedness or to violent prejudice.

This difficulty seems to point clearly to the following query: How can a race of teachers be gradually educated into the spirit of a tolerant, fair-minded discussion of controverted questions? No sudden or marked change is likely to take place in the direction of tolerance because it is a question of improving the inner spirit and temper of teachers, a question of self-control and reasonableness. Growth in self-mastery and in judicial tolerance is growth in the innermost spirit of charity and good sense, and we must not expect too rapid a progress in this highest form of education either in ourselves or in others. Unconsciously we are all too deeply rooted in partial and biased views and habits to be easily capable of frank and many-sided tolerance.

But the place to begin is with ourselves and with the body of teachers whose attitude of prejudice or tolerance is repeated, on the average, in the growing generation of children.

It does not seem so very difficult to set up such a standard and ideal of fair-mindedness as will appeal to the good sense of teachers. Nor is it difficult to point out numerous opportunities for exercising the spirit of candor and of suspended judgment, both in school management and in instruction. The historical materials and topics worked over in the school grades are even better for purposes of cultivating fair-minded study than those controverted, and as yet unsettled, questions of present society and government treated in the political and social science of colleges and universities. Very many of the important history topics usually handled in the sixth, seventh, and eighth grades of the grammar school, were two-sided questions, furnishing the best opportunity for a thoughtful, unprejudiced weighing of evidence. For example: the attitude of the Puritans toward the Quakers and other sects; the conflict between the French and English for the possession of North America, the Pequod War and the French wars against the Iroquois; the rights of royal governors and of the colonies; the question of taxation of the colonies by Parliament; in adopting the Federal Constitution, the conflict between state rights and federal sovereignty; the acquisition of Louisiana and Texas; the implied powers of the Constitution; the treason of Arnold; the execution of Major Andre; the important acts of leading men in important crises, as Jay's treaty with England; in fact all treaties and compromises at home and abroad, all wars, all conflicts of political parties involve difficult questions requiring impartial weighing of evidence. No just appreciation of these problems and their importance can be had except by a candid survey of the facts and arguments on both sides.

The common historical materials worked over now in the schools furnish, therefore, the precise occasion needed for the exercise of fair-mindedness in study.

It is in this class of historical and social problems, where exact mathematical tests and reasonings are impossible, that candor and a thoughtful weighing of reasons and even of probabilities can be cultivated. In mathematics there is no demand for candor, but absolute dogmatism is permissible. In history all important questions are problematic. They involve not only questions of right and wrong, but of expediency and necessity, of public sentiment, of prevailing opinions

and prejudices. The suspended judgment is necessary in the treatment of historical controversies. Prudence, caution, open-mindedness to all sides of a question are indispensable to fair and honest study. The questions of history are good materials upon which to develop a judicial spirit because they are so interesting and so objective. We are not warped by our own interests and prejudices, and it is easier to be fair and comprehensive.

Below the high school the materials for civic training and culture for developing a patriotic American spirit are found also in reading and literature. A few out of the many selections already used in some schools for this purpose are here noted. Burke on Conciliation with America, Longfellow's Courtship of Miles Standish, Building of the Ship, and Paul Revere's Ride, Hawthorne's Stories of New England and Grandfather's Chair, Whittier's Voices of Freedom, Barbara Frietchie, National Hymn, Webster's two speeches at Bunker Hill, at Plymouth, on Washington and on Adams and Jefferson, Emerson's American Scholar, The Fortune of the Republic, The Emancipation Proclamation, Bryant's Song of Marion's Men, Our Country's Call, O Mother of a Mighty Race, Washington's Letters and Farewell Address, Holmes' Grandmother's Story of Bunker Hill, Ballad of the Boston Tea Party. Robinson of Leyden, Lexington, Lincoln's Inaugurals and Gettysburg Speech, Lowell's Under the Old Elm, Concord Ode, and Essay on Democracy, Autobiography of Franklin, Mrs. Hemans' Landing of the Pilgrims, America and other patriotic songs, The Declaration of Independence, Scudder's Essays on Literature in Schools. The best of our American poets and statesmen have given in the forms of literature a dignified and commanding expression to the best ideals of our civilization. We are waking up to the fact that hand in hand with the astonishing growth of our material resources in the last hundred years has gone a growth in culture-ideals, social, political, and religious, which is of supreme educative value for the present and the future. Our poets and true statesmen have made articulate the best experience and thought of our national life. They have winged this thought with poetry and eloquence, stirring the hearts of mature men and women and touching the sensitive life of millions of schoolchildren.

An unpleasant attendant of this genuine spirit of patriotism and true Americanism is a sentimental bombast or braggadocio which has been fully exploited in this country for many years. It is a too common counterfeit for true patriotism, exalting everything American and placing

other countries in contempt. It is the exact opposite of the spirit of candor and liberality which should be willing to face and acknowledge the evils in our own society and approve and adopt the merits found in the societies of other countries. The spirit of indiscriminate praise and boastfulness in regard to all things American is not the spirit to cultivate in our American schools with our future citizens. Our best American literature does indeed reflect the self-respect of a great and free nation, proud of its past and exuberant in future hopes, but it is a pride based only in small part in our material riches and physical strength. Physical strength and resources are valuable in a nation, as they are in a man but we do not admire a giant for boasting of his bulk and muscle.

One cause of this boastful spirit is the manner in which we have selected and used selections from our patriotic literature. The brief outbursts of eloquence in Webster and our short patriotic ballads when separated from their setting in longer masterpieces of literature and in life have given a wrong impression of boastfulness. When we use Webster's speeches as wholes a body of thought will be put behind these utterances, giving them full meaning. To get at the true enlightened spirit of patriotism we need to consult Emerson, Webster, Lowell, Everett, Bryant, and Sumner in their complete poems, essays, and speeches.

Another cause of the narrow and perverted American spirit is the manner in which our history has been taught. In our treatment of the Revolutionary War, the War of 1812, and the Civil War a false pride has caused us to magnify our own virtues and successes and to minimize the worth of our enemies. It may be said that very little effort has been made in our histories to treat any of these conflicts in an impartial way, thoughtfully presenting the causes and conflicts on both sides. There is a tacit assumption in nearly all cases that we were in the right and our enemies in the wrong, certainly a very primitive and barbaric mode of getting lessons out of history.

Still another cause of partisan spirit in our education has been steadily cultivated in our debating societies, contests, and various forms of literary contention. The philosopher, John Locke, was strongly of the opinion that debate, controversy, and the love of contention were not favorable to the discovery of truth, and no matter how much we may admire skill and power in debate, we must always remember that the partisan and the advocate must be laid aside in the search for truth.

Our present course of study certainly has a considerable influence in shaping the political ideas of children in preparation for citizenship, but there seem to be two defects which may be clearly pointed out. On the one side an exaggerated and somewhat bombastic spirit of patriotism has been cultivated which we might fairly call sentimental patriotism, and on the other side many of the facts belonging to history and civics have been taught in a spiritless way, as if facts alone constitute education. The constitution and framework of our government are important enough, but they are often taught in a listless and perfunctory way. It is not difficult to set up the ideal towards which we must work in the teaching of civics.

The golden mean between these two extremes is an interesting, instructive study of our history, government, and social life which not only gets at the important facts but constantly awakens those better sympathies and ideals which are so necessary in any true culture.

PLAN AND PURPOSE OF THE NATIONAL HERBART SOCIETY.

This society is now beginning its third year of aggressive discussion of important topics in education.

It is the well-matured plan of the society to secure the best papers within its reach on the most vital problems of American education. These papers are printed beforehand and circulated among the members so that they may be carefully read and weighed before the time for discussion in the meetings. The publications may then be taken home and their practical value tested. This plan provides (what is not usual in our educational meetings) for very careful preparation of papers, thorough and complete discussion after thoughtful reading, and the later study, testing, and application of the theories proposed. In this way it is behaved that progress can be made toward the settlement of some of our vexed questions of education.

PUBLICATIONS.

The publications already out and definitely planned are as follows:

First Yearbook for 1895 -

- "Concentration," Frank M. McMurry.
- "The Culture Epochs," C. C. Van Liew.
- "Most Pressing Problems," Charles De Garmo.
- "Course of Study for Primary Grades," Mrs. Lida McMurry.

First Supplement to the First Yearbook. (Denver)-

- "Discussion of the Denver Papers."
- "A Descriptive List of English and German Works on Herbartian Pedagogy."

Second Supplement to the First Yearbook -

"Interest as Related to Will," John Dewey.

Also the Discussion of this Paper at Jacksonville.

Second Yearbook, 1896. (Buffalo) -

- "Isolation and Unification as Bases of a Course of Study," by Emerson E White. Reply, by Charles A. McMurry,
- "A Symposium on the Culture Epochs." Papers by Lukens, Seeley, Brown, Dewey, McMurry, Galbreath, Hinsdale, Felmley, and Van Liew.
- "Present Status of the Doctrine of Interest," De Garmo.
- "Literature in the High School," J. Rose Colby.

List of Books.

Supplement to the Second Yearbook -

"Training for Citizenship," Jeremiah W. Jenks.

Third Yearbook ----

"Moral Education," John Dewey, Charles De Garmo, Wm. T. Harris, John Adams.

Supplement on "Training for Citizenship," E. J. James, C. C. Van Liew, J. W. Jenka, F. McMurry, L. Galbreath, H. M. Slauson, O. T. Bright, Frank Dixon, and C. McMurry.

MEMBERSHIP.

Single membership in the National Herbart Society may be had by sending to the secretary one dollar per year (including the Yearbook and two Supplements). Back numbers of the Yearbooks may be secured from the secretary for fifty cents each; Supplements for twenty-five cents each. Ordered in quantities there will be a reduction of 20 per cent.

LUCAL CLUBS.

A plan has been in operation for the formation of local clubs of those wishing to study the Yearbooks and Supplements. Many such local clubs have been formed at Normal Schools, at Universities, by city superintendents, and in some cases by county superintendents. When four or more persons wish to form a local club the membership is fixed at 75 cents for each person. They will elect a chairman, who will conduct the correspondence, receive the Yearbook and Supplements for the club, sending the money, and forwarding all questions and communications to the secretary of the National Society.

COURSES OF READING.

For those local clubs wishing to take up a course of reading in Herbartian Pedagogy such a course is fully outlined in the First Supplement to the First Yearbook and also in the Second Yearbook. A descriptive catalogue of the leading books in English and German is given.

The success of a local club depends largely upon the chairman, who should not only receive and distribute the Yearbooks, but fix a regular time for meetings, appoint a member for each meeting who shall present a well prepared paper and assist in the discussions. In the discussion of important topics, such as concentration, apperception, interest, culture epochs, a series of comparative readings from several books should be planned.

Those wishing to become members of the National Herbart Society, either singly or in clubs, should send their membership fee to the secretary.

CHARLES A. McMurry,
The University of Chicago,
Chicago, Illinois



SUPPLEMENT

TO THE

THIRD YEARBOOK

OF THE

NATIONAL HERBART SOCIETY

FOR 1897



OBSERVATION AND APPERCEPTION

PROFESSOR ARNOLD TOMPKINS

THE APPLICATION OF THE PRINCIPLES OF HERBART TO SECONDARY SCHOOLS

DR. FRICK AND DR. FRIEDEL

EDITED BY

CHARLES A. MCMURRY

SECRETARY OF THE SOCIETY

CHICAGO

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OBSERVATION AND APPERCEPTION.

By PROF. ARNOLD TOMPRINS, University of Illinois.

- 1. Thinking is the process of realizing universal spirit through an individual object. There must always be present in the mind of the thinker an individual, concrete object—not necessarily material. There must be present, also, some creative energy, force, or spirit; some universal element, which determines the object; and which, therefore, the object signifies; or, which constitutes the reality of the object. All thought moves in the relation of the individual and the universal.
- 2. Hence, in thinking some individual must always be present. It may be present in two ways: (1) present through the senses—in sense-perception; (2) present through the representative power, or powers of the mind. Thinking the meaning of objects present to the senses is observation; or, observation is a search for universal truth by sense contact with objects. The word observation is sometimes used to include the activity of the mind on an absent object—an object only represented to the mind by memory or imagination; as when we speak of observing an historical event. With this extension of the use of the word all thinking is observing, since, in thinking, an individual must always be present in the mind, whether we accept the narrow or the broad meaning, observation includes the whole mental life exercised upon an object.

In the narrowest meaning of the word, it can never be restricted to the mere sense activity of the mind. It can never mean less than the reading of meaning into the object present to the senses, and this requires the complex activity of the whole mind—perception, memory, imagination, judgment, and reason, with feeling and volition. Not one of these can be omitted from a real act of observation. One cannot see an object without syllogizing as Dr. Harris has so clearly shown. Hence, the superficiality of all discussions which limit observation to the mere activity of the senses; and the amusing spectacle,

often witnessed in the schoolroom, of exercises given to train the observing faculties. To discuss adequately observation is to discuss the entire psychology of education; and to train the observing powers is to educate the pupil.

3. As we have seen there must be present in observation not only an individual object, but some universal, creative energy to be identified with the individual observed. This universal is the mind of the thinker himself. The universality of the mind of the thinker absolutely determines the universality given to the object thought. The individual object can signify to the thinker nothing above his own life. What I am, measures accurately what I think. The thinker himself is the apperceptive basis in all observations—the universal which must be present with the individual object to be observed. Apperception is thus an organic phase of observation; or rather both are phases of one process. One emphasizes the individual, and the other the universal element in the process, or, rather, each emphasizes one of the different directions of the process—the mind toward the object, and the object toward the mind.

"Apperception mass" is an expression for the attained life of the thinker by which, and through which, the object is observed. The expression seems to me somewhat mechanical, masmuch as it suggests that an individual is one thing and his mass of ideas another.

4. The self, which is the apperceptive basis of observation, becomes a larger self through that process. The self finds the self in the object observed, comes to its inheritance in the object; realizes itself in the object. Every act of observation, therefore gives vantage ground for further observation, in that the individual object observed, enlarges the life of the observer. Other things equal, he who dwells in the highest eminence of life and thought, is the best observer; and to cultivate the powers of observation is, again, simply to educate the individual. Or may we not say that observation involves the whole process of life? This may appear thus: The fundamental impulse of the soul is that of self-realization. This end of life is sought in the world of objects manifest to the senses. How object is observed and interpreted as a means of self-realization. And here we have the clue to interest, which includes observation. The word interest means to be between. Unless the object is felt to be between my present, real self, and my future ideal self, I can have no interest in it. Hence, ideals of life determine the scope and character of one's observation. When Darwin set up as



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an aim in his life the refutation of the doctrine that species are separately created, what he should then be interested in observing was thus predetermined; likewise the character and details of his observation. Hence, in cultivating observation the pupil must first be led to propose to himself some life problem. Mere observing, i. e., looking at things, is a meaningless and purposeless process. To be of value it must be directed and inspired by some life aim, the higher the better; for the higher the aim of life the more fruitful the observation.

5. By implication we see in all this the fallacy of slicing up the mind and trying to cultivate it part by part; as the senses, memory, etc. And yet we often see lessons given with the avowed purpose of mere sense training, etc. Since the whole life is present in every act of the mind, should not all processes of education move under some dominating life purpose?

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AUTHORS' PREFACE.

The theme appointed for the conference of directors of the Province of Saxony for the present year (1883), namely, "How far the didactic principles of Herbart-Ziller-Stoy are serviceable for instruction in the secondary schools?" was treated with great interest by a majority of the reviewers appointed by the separate assemblies of teachers. This subject was handled in such a thoroughgoing, fruitful manner, and awakened in larger circles of teachers such a degree of attention, that it seemed desirable to make these discussions more general and easily accessible than by their reception into a collection of all the conference deliberations. Since, moreover, the undersigned, in preparing the principal report (as also his colaborer), has desired to give expression as little as possible to his own view, but rather to that of the other reviewers, he thought by arranging a separate reprint to perform a welcome service to these numerous reviewers.

The passages quoted from these reports establish the fact that the necessity for a rational didactics in secondary instruction is felt in ever wider circles; whether it be to retrieve what has been lost, or to prepare a profitable solution of many highly important school questions which especially concern the present time. The fact that a rational didactics has nowhere been so energetically and systematically cultivated as by the school of Herbart-Ziller-Stoy, makes it at least a historical duty no longer to ignore the work of this school, but to test it without prejudice. Perhaps, then, it will appear to others also, as well as to a large number of the reviewers, not only that the prejudices will disappear, but that a fair-ininded estimation will lead to the conviction "that this didactics has more than a simple historical, contemporary value; that it contains elements to which we must attribute a permanent value; that here treasures he hidden which are not yet sufficiently known, honored, and utilized; leading points of view are revealed which just at the present time insure a welcome anchorage, a desired support."

It would not be the first time that the permanent value in the work of a pedagogical genius was so late in becoming a possession of all.

Even the great productive principles of Pestalozzi did not really pass over into the general pedagogical consciousness until after the celebration of the year 1846, and it was a long time before people could overcome the prejudice against his didactic models, a prejudice which mistook the shell for the kernel. It is time for us to bethink ourselves that Pestalozzi and Herbart lived also for the secondary schools.

DR. FRICK and DR. FRIEDEL.

THESES.

HERBART'S theory of the nature of the soul as of a perfectly simple monad is rejected by the reviewers.

Knowledge exercises, indeed, a strong influence upon the will, but it should not be regarded as the essential source of the will.

Not knowledge, but interest is the purpose and aim of all instruc-

The intellect itself requires, as far as possible, a many-sided cultivation, and a moral-educative instruction must provide for this; only this cultivation should never separate itself from the training of the sensibilities and the will.

The greater part of those reviews which touch upon this fundamental doctrine of the Herbart-Ziller-Stoy didactics, moral-educative instruction, have spoken in full agreement in its favor and in part with great decision.

The materials offered for concentration in the common school are rejected for the secondary schools. But "very weighty and valuable thoughts for our secondary schools are involved in the proposal of such important material of concentration from the epochs and turning-points of historical development,"

How numerous, or, rather, how numberless, indeed, are the connecting threads which run back and forth from one object to another, and from one semester to another, only the teacher who stands in the midst of instruction is fully conscious.

The subject-matter of instruction must be organized out of many articulated parts.

In every single branch the subject-matter should be carefully ordered and divided up into unities, and it should not be heaped up in masses or in encyclopedic fashion.

THE VALUE OF THE DIDACTIC PRINCIPLES OF HER BART-ZILLER-STOY IN VIEW OF THEIR SERVICE-ABLENESS FOR THE INSTRUCTION IN SECONDARY SCHOOLS.

By DIREKTOR DR. OTTO FRICK (Halle) and DIREKTOR DR. FRIEDEL (Stendal).

DOUBTFUL PRESUPPOSITIONS OF HERBARTIAN PEDAGOGY.

The presuppositions of Herbart's pedagogy and didactic, so far as they relate to his conception of the nature of the soul as of a thing perfectly simple, without content and relation, a thing also without ideas or consciousness upon which, through educative instruction, perceptions must be grafted, and on the basis of the perceptions, desires, and finally a character must be built—these presuppositions find no defender among the reviewers, but unanimous contradiction, so far as the reviews and conferences in any way touch upon this point. This conception of the soul is disproved in the most fundamental way by the reviewers from Erfurt, Rossleben, Halle, Seehausen, and Muehl hausen, as incompatible with the notion of the human soul, created in the image of God, with the mysterious depth of its inborn powers, with the freedom of the will, with its spontaneously active nature, with experience, etc.

In the following manner, also, the doubtful consequences of the Herbartian psychology in their bearings upon pedagogy are laid aside in agreement with J. H. Fichte (Pfisterer) (Pedagogical Psychology, 1880, p. 26, etc.). "Herbart restored the notion of the real soul, and insured forever to psychology the principle of realistic individualism, but being fettered by a defective metaphysics, which was shut up within the most abstract categories, he was not able to think of the soul, except in the most abstract manner, as simple position, and at the same time as destined to remain perfectly simple."

"Herbart, through his principle of the formal simplicity of the soul-nature, of its emptiness in regard to all the original faculties, is driven to an overstraining of the pedagogical problem, to an overestimation of the teacher's power which experience in no way confirms. In consequence of this principle, education should be able to

make out of the totally indifferent nature of the soul, what it will '(On this point compare Weiss, p. 28.) "Teacher and educator with Herbart, are not simply the gardeners, who bring to development the existing germs of the soul, through care and protection, but they are the builders who construct the machinery of the mind. The soul is, indeed, super-sensual, but it is a thing of nature thoroughly dependent, wholly controlled by the mechanism of the thinking process, as it were, only a channel for the stream of ideas which is conducted through it, while it should be an independent source of mental life."

When Herbart's view of character-development culminates in the sentence, Out of knowledge, arises will, there lies in this psychological determinism and doctrinary intellectualism, the woodrow below of Herbartian pedagogy. Knowledge exercises, indeed, a strong influence upon the will, but it should not be regarded as the essential source of the will. (Rossleben Ref.) "From such a view is derived the insufficient moral and religious basis, without which every pedagogy is a perpetuum mobile without anchorage and without aim. For in spite of the very worthy moral and religious zeal of Herbart, the ethical with him is only a subdivision of the esthetic, the religious, nothing more than a deposit of the mental process of development in man without independent worth and peculiar significance." (Erfurt G., Korref.)

We share fully in these doubts, but it is precisely to the one-sidedness of this fundamental psychological conception that we are indebted for the energy with which the philosopher has so successfully proneered his way in investigating and establishing the laws of a systematic development of the soul, that is, of a rational didactics. Accordingly, the disadvantage for didactics in the narrower sense is in reality, not so great; Herbart himself, does not go back to the nature of the human soul, either in his pedagogy, nor in his outline of pedagogical lectures.

The very emptiness of this fundamental psychological conception, not only makes possible the introduction of other more substantial views, but it makes them, in fact, easier. If it is, in general, doubtful, whether any one of the changing philosophical or psychological systems should be made the basis of didactics, the Herbartian system is relatively the least objectionable, because other philosophical views will more easily supplement and harmonize with it. Herbart's system appears to the reviewer, from Naumburg, in fact, as a neutral ground

upon which the divergent philosophical and religious views of schoolmen, may meet. "Many of Herbart's propositions may be adopted, also, by those of a different psychological view." (The same may be said of most of his didactic requirements.)

"The tributary science of ethics, so necessary to pedagogy, may be any system which has a scientific basis, and which recognizes in men the obligation of moral ideas. And the necessary tributary science of psychology, may be any psychology which confirms the educability of the will through the power of perceptions and ideas, and which obtains the laws of psychical life from empirical observation." (Pforte Korref.)

Herbart's conceptions of the nature of the soul, appear accordingly in modified form in Ziller (Grundlegung, p. 180; Vorlesungen, § 7, p. 47,) and in a still different form in Stoy (Ensykl, § 36, compare §§ 30, 89, 97.) and Kern § 73. On p. 3 Kern is satisfied with this statement: "Pedagogy can come to terms, therefore, only with a psychology in which the soul is an entity, which in its activities and static conditions shows throughout an inner conformity to law." He omits to characterize more nearly such a psychological theory, because this is not a concern of pedagogy, but of psychology,—ground sufficient, also, for us that we, on account of the one-sidedness of Herbart's conception of the nature of the soul, should not be frightened away, a limine, from occupying ourselves with him.

THE NATURE OF INTEREST.

Not knowledge but interest is the purpose and the aim of all instruction. While, on the contrary, interest is commonly turned about and falsely regarded as a means and a condition for instruction (Rossleben Ref.). While the ordinary practice puts interest in the service of instruction, so that, through awakened interest, the appropriation of knowledge is made easy and secure, Herbart will have interest regarded as the aim of instruction (Seehausen Ref.). Ordinarily, says Herbart, teachers try to interest the pupils so that they may learn. Pedagogically correct is the opposite. They should learn so as to establish an interest for later times (Willmann).

The most important duty of instruction consists, according to Herbart, in converting voluntary or forced attention into involuntary and appropriating attention (Eisleben Korref). "The word interest has with Herbart not the meaning of a secondary element, as if one should require that instruction be of such a nature that the pupil may follow with interest. But interest is set up as the very thing which instruction aims at chiefly. In the former case the accumulation of knowledge and the appropriation of skill would ever remain the essential aim of instruction. But that which concerns interest would only come in in the second place so as to ease up and alleviate greatly this irksome work. In Herbart's sense interest, however, has no reference at all to such tasting and catching at the sweetmeats of study, but rather the tension of mental power, the developed self-activity of the mind in the whole range of its capacity." (Saizwedel Ref., also Kern, § 9)

Such an interest leads to the threshold of will. Interest is that condition out of which will grows (Stoy, p. 77). Interest builds every where the necessary transition to will (Ziller). It is the power which is directed toward the preservation and enlargement of our mental possessions (Kern, § 9). This lever of the inner life, this living bond between knowledge and will, between thought and action, which is also associated with a peculiar mental satisfaction or pleasure is interest (Erfurt, G., Ref.).

MANY SIDED INTEREST.

Interest becomes such only when it is many sided. In regard to the kinds out of which it is formed, and the logical explanation of their distinctions, consult Kern's Concise Summary, § 11, and also his explanations, § 37, etc. When one has taken a deeper view of this he will have no important criticism and the somewhat peculiar and foreign terminology will not long trouble him (on the one side empirical, speculative and esthetic, and on the other side the sympathetic, social and religious interest). If anyone finds the matter beclouded by these terms he may perhaps set things to rights somewhat, as follows, the kind of interest may be determined, first, according to the objects, and here we distinguish (a) a world in us. (b) a world about us, and (c) a world above us. The world in him should not be for the pupil an object of his consciously testing, self-observing, reflecting thought. It is unconsciously to him the object itself to be educated, but the world above him and around him may well be an object of thought. The world around him is first nature (the interest, feeling for nature), and second, the historical world on the side of science (the interest, scientific spirit), art (the interest, art feeling). social life (a) of the individual, (b) of the whole (the interest, sympathetic sense and social feeling). Finally the interest which loses itself in the secrets and truths of the world above him guides to religious interest.

The kind of interest may also be determined, second, according to the varying relations to the objects, whether it be by the empirical (also esthetic) observation or an investigating search for knowledge which goes after the reasons and binds things together (both perception and conceptual understanding) or finally in the ethical judgment (moral feeling). It may be, therefore, an empirical, speculative and ethical interest, or one may draw the categories from the outline in Schrader's Theory of Education, § 16. The main point is that the teacher with a clear consciousness make it his duty to awaken and develop a many-sided interest, as often as possible by means of well-planned labor to produce that condition in the pupils which the reviewer in Salzwedel describes so well as follows.

"If now we cast a glance into the experience of our own practice and test the cases more closely where, as regards the success of our instruction, we had the happy consciousness that at the instant we had struck the right chord and, to use another figure of speech, with full sails were steering over a smooth surface toward the aim, there will always come into our memory the glowing eyes of the pupils which at every moment of the presentation were marked with an earnest zeal or with a silent absorption. An earnest quiet ruled the class, broken by no interference, threat or censure, yet all their mental powers were in tense vibration. in order to take a full impression of the presented object, in order to wholly appropriate it and, as it were, to consume it. Here we have, in fact, the living presence of the interest which Herbart conceived, the undivided life and action of the mind in the matter, and at the same time the greatest concentration of the self; and we must acknowledge that these were the most fruitful and satisfactory moments of our instruction. Whatever sinks into the soul of a pupil under such conditions sticks fast, as experience proves, and produces manifestly an increase of mental power.

"The more frequently these conditions recur, the closer they follow one another, the more intense and lasting they become, the less they are limited to one phase or branch of instruction, but rather spread themselves equally over all fields of study (if these fields of study are well chosen), the better is the prospect that a rich, self-controlled personality, which justifies the best hopes, will prove the ripe fruit of painful labor."

But it is also plain that these kinds of interest will deepen in content and strengthen in degree according to our conception of the nature of the human soul, and that this Herbartian requirement is out of harmony only with a materialistic view of the world, and as to the rest, it hay be harmonized with every standpoint that involves an earnest, moral view of life, and also with the Christian view.

"To be sure, a Christian theory of education conceives the ideal of training and culture in a fuller, deeper, in a more concrete and plastic manner; it applies to mental life not only a quantitative, but also a qualitative, ethical standard, for it regulates knowledge from the standpoint of conscience, does not allow the will to be determined solely by knowledge, but knows that the latter is conditioned first of all by the good or perverted quality of the former. It looks both into the depths, into the evils of human nature and into the heights; for it knows the cure and possesses in the facts of experience and in the theories of the personality, that is, the creation of man in the image of God, of sin and redemption, of salvation and of holiness, very different powers and levers, far surer pledges for the attainment of its aim than Herbart and his system, but with this idealism it may safely combine against the encyclopædic and materialistic enemies of all true culture and religion."

A single example. A candidate treated in Quarta' of the Real Gymnasium from Nepos Aristides the seemingly dry chapter in It was necessary to remark to him afterwards that he had made too little effort to awaken interest in its various forms. And yet there was not lacking opportunity even here. In a tactful manner, such as to draw the whole class into the effort, let the 460 talents be converted into dollars and cents by the pupils themselves. Not only let them point out Delos on the map, but as in the neighborhood of Syros, which is already known to the Real school pupils in geography as a trade center for the Levantine steamers; let them find out from their own observation the central importance of this island as of an ôutpalds rife yris. Bring the notion of a commune aerarium near to them perhaps through reference to the royal war-treasure deposited in the Julius

^{&#}x27;The course in the German gymnasium is nine years. The highest class is called Prima, the lowest Sexta. The Latin names of the classes are Prima, Secunda, Tertia, Quarta, Quinta, and Sexta. Each of the three higher classes includes two years,

tower of the Citadel in Spandau (empirical interest). Answer the question: Why to Delos? Why to Athens? by reference to the old Delian Amphictyonic council with the league's sacred temple of Apollo in Delos, which had been already renewed by Pisistratus and with which a connection was now to be made. Show that in the later transfer to Athens lay the decisive recognition for its whole future development of the superior position of this state, and its importance as head of the league. (Explanation of inner reasons, that is, speculative interest, but also social interest, the explanation of which is suggested by the words: "ad classes aedificandas exercitusque comparandos"— a strong marine is a condition of the hegemony.) Cultivate here also the personal sympathy for the chief which is already awakened. Note the contrast between his powerful station as a royal treasurer and his own poverty. He outlives his great rival; with what sort of feelings? The gratitude of his country is transmitted to the children, etc. (sympathetic and ethical interest). Point also to the overruling providence which lay in the fact that, while the real originator of Athenian power, through his own guilt, is persecuted as a traitor and dies in banishment, Aristides, at first his opponent, finally carries his rival's work to a conclusion and wins also the honors; an example of σωφροσύνη, i. e., the keeping of good conscience, and as a picture of a bixages. "Aristides Justus" is the ground thought of this whole vita (religious interest).

That even in such an apparently external piece of work as the learning of vocabularies, in a wholly natural way, an awakening of different kinds of interest may take place, the sketch of a preparation in our pamphlet Seminarium praeceptuum, p. 38, etc., may furnish proof.

If the teacher leads the children to observe those numerous passages in the *Iliad*, and to dwell for a moment upon them, in which the personal sympathy of the poet for a person and his fate is manifest (for example Bk. II, xvi, 250; III, 243; XI, 604, etc.), in this way there is produced in the pupil a personal (sympathetic) interest, first for the poet, and second, in still greater degree, for the person concerned.

As to the cultivation of a many-sided interest in natural-science instruction, the reviewer from Halle (R. G.) expresses himself admirably as follows:

t. The empirical interest is touched by the observation of the variety and change in phenomena.

- 2. The speculative interest is set in motion by showing that the whole organization of a plant or animal is in harmony with its mode of life and with its needs. Examples: Show in the leaf of a plant the form and the function, give the reason why it is spread out like a surface, in water plants otherwise than in land plants, sometimes covered with hairs, in others not. The skeleton of birds and of mammals, etc.
- 3. Esthetic interest is kindled (a) in observing the form and color of natural objects, (b) in studying beautiful landscapes upon excursions, (c) by singing beautiful nature songs. Esthetic and contemplative study of nature is one of the highest and most deserving aims of natural-science instruction.
- 4 and 5. The sympathetic and social interests are stimulated by imbuing the pupil with an insight into the law-abiding course of nature, and by showing him that he is a living part of the same, that in his needs he is dependent in large measure upon her (domestic animals and agriculture), that every encroachment upon nature is attended with definite results (c. g., when mountain forests are cut down floods follow), that different creatures of all kinds are mutually very closely dependent upon one another.

The religious interest is awakened by the constant reference to the steady causality in nature which forces upon us the conclusion of a final originator of the same. The nature of the requirement lies in this, that one should make the effort to live the life of the thing in his inner experience; and then he should make it his well defined duty to bring about the same thing in the pupils. Then will instruction become truly lifelike and the well-justified complaint that so many teachers are not able to awaken the necessary interest in pupils will diminish. The teacher himself must first learn to see, to experience, and to understand that he may be able to teach others to see, to experience, and to understand. But what Schrader says in § X is also true of this one: "This remark, as to the justification of which there cannot be the least doubt, is simply set aside by the majority of teachers." The reviewers, so far as they touch upon this fundamental point of the Herbart-Ziller-Stoy didactic, are in unanimous agreement. (For example Seehausen Ref. Thesis: "The instruction must be of such a character that it shall be able to awaken in the pupil the principal kinds of mental interest which correspond in the main with those set up by Herbart." Pforte Korref. Thesis: "The demand of the Herbartians that by awakening a many-sided interest as far as possible in every recitation period, the self-activity of the pupils is to be secured, deserves recognition.") On the contrary one voice (Seehausen Korref.) sets up the
counter proposition: "The Herbartian requirement that a many-sided
interest is to be aimed at in the pupils cannot be designated as a
practicable principle in the higher schools. Reason: The demand that
the gymnasia be freed from the sluggish mass of the mediocres and
from the unwilling horde of the indifferent, has no prospect of fulfillment." Also in the conference discussions opposition was not
lacking. For example: In one case this modification was proposed
—the awakening as much as possible of one-sided interest.

HARMONIOUS INTEREST.

"The result of this many-sided interest when once produced, is a wealth of inner life both of power and depth as well as in content and fullness which is produced by a self-activity developed intensively and extensively." (Salzwedel G. Ref.) "It is a mental condition which is superior to all concurrent mental states except that of will, fills us with unbroken satisfaction and moves forward with steady, self-active progress toward ever new and higher aims." (Ziller Vorl., p. 151.) "It is the peculiar condition of the sensibility of the soul, the inner mobility and receptiveness, which holds the middle ground between observation and aggressive action; when the soul is in a state of relative inner content yet cherishes the desire for continued enlargement and deepening of the circle of thought. It is the spirited and open attitude, the lively self-producing power, which steadily expands toward the highest aims, toward the ideals of the beautiful, the true and good, which bows humbly and thankfully before sacred things and rises to the eternal" (Erfurt G. Korref) This result is the so-called " harmomous (evenly-balanced) interest." (Herbart.) And we find here, for the first time, reduced to a formulated expression, what we call culture in the deep, spiritual sense-what we denominate universal culture. (Erfurt G Korref)

MORAL-EDUCATIVE INSTRUCTION.

It is clear that this universal culture has also character development for its aim, and that the instruction directed to this end may be called in a special sense moral-educative instruction.

As to the distinction between moral-educative instruction and that which is not, see Kern, § 4 and § 17.

This problem, on the whole, brings out the contrast between an instruction which sets up as its purpose to extend information and knowledge, and that other higher instruction which in every single labor is directed to the translation of information into knowledge and culture. "The intellect itself requires as far as possible a many-sided cultivation, and a moral educative instruction must provide for this, only this cultivation should never separate itself from the training of the sensibilities and the will." That these shall go hand in hand, and to require this as an indispensable test of a good instruction, is the incontestable right of the Herbart school." (Rossleben Ref.) All building up of the circle of thought, all intellectual training and all the skill which the pupil acquires through a moral-educative instruction, should serve only as a means for preparing in him that condition of mind and of sensibility which brings him near to the ideal of the personality. (Ziller) In regard to the serviceableness of the Herbar tian requirement, even when one does not agree with his psychological premises, says Ref. Rossleben, "It is false to say with Herbart that morality has its roots in many-sidedness, but that it is essentially conditioned by this, and that instruction, therefore, should have the greatest regard for building up the circle of thought, is not to be denied. Even if one does not attribute to instruction an all-controlling place and importance, still, beyond a doubt the thought is of great significance that it, with Herbart, should be placed expressly and directly in relation to the final aim of education, the development of moral character."

But that an emphatic reference to a demand for a moral educative instruction for the present secondary schools is by no means superfluous is emphasized by numerous reviewers. We are concerned here with a conflict, or at least a limitation of the widespread notion that the work of the secondary schools has to do, first of all, with the communication of the formal training by means of a very many-sided mental gymnastic, while this should serve only as a means to an end "We are able, therefore, to subscribe with full conviction when the Herbart school, with great positiveness, sets itself against the old prejudice that instruction in our secondary schools serves the purpose mainly of a so-called formal training, that it busies itself chiefly with the forms of things or with the largest possible accumulation of knowledge without pursuing aims more far-reaching than these. Instruction and learning should not only aim at mental gymnastics, but

should, first of all, work toward moral education." (Rossleben Ref.) With a still wider perspective, says Pforte Korref, "I cannot agree with one of the reviewers that the secondary institutions have always kept in mind sufficiently the demands of a moral educative instruction; I am rather of the opinion that the disregard of this requirement is essentially to blame for the fact that the gymnasia through whole decades have measured their work of instruction too much upon the standard of the studies carried on at the universities, and accordingly have fallen into a grammatical perversion (Unfug) not yet fully overcome. In my opinion it is at present of great importance to the secondary schools, in view of the requirements made in university departments of natural science, mathematics, and medicine, that they be fully conscious of the fact that their instruction should be of a universal, educative character, and that the university professors are under obligation to regulate their work by that of the secondary schools and not vice versa.

The greater part of those reviews which touch upon this fundamental doctrine of the Herbart-Ziller-Stoy didactics, moral-educative instruction, have spoken in full agreement in its favor and in part with great decision, e. g., Seehausen Ref. Thesis. The instruction of the gymnasium should be moral-educative; consequently formal training in the sense of a simple mental gymnastic is declared not to be its leading aim (Nordhausen G. Korref. Thesis). Only a moral-educative instruction has any justification in our secondary schools. Its aim is properly presented by Stoy's school as the building up of a moral-religious will (Aschersleben R. G. Korref. Thesis). The moral-educative instruction purposes not a completeness of knowledge in any branch, it only teaches what is fundamental in each subject, and lays its chief stress upon awakening of interest.

CONCENTRATION OF INSTRUCTION.

From the contrast of a connected moral-educative instruction to everything which is directed toward all-sided superficiality, toward the appropriation of school knowledge in the form of compilations, and cyclopædias, and aggregates, is revealed the importance which attaches to the notion of concentration in the Herbart school. Nor is this importance less manifest in the comprehensive range which is attributed to this notion.

"For the entire power of all that which man has ever felt, experi-

enced, or thought, must educate; not the single or isolated thing "
(Herbart Padagogic Vorles.) "The eyes must be opened and the sympathy awakened, for the world in its greatest circuit, upwards and downwards, both in nature and in human affairs." The conflict between these requirements can be removed only by a stringent concentration of instruction which makes the spiritual life of the child the center, and finds its task in the effort to build up and weave together into one whole this inner spiritual life of the pupil (Kern § 15), out of knowledge to produce a well-knit, well-woven whole, which governs the whole inner life of the pupil. The center remains the moral religious life of the person which is to be established in the pupil; to this everything which is present in the soul or is produced within it must enter into relation (Ziller, Vorl., p. 161.)

SO-CALLED MORAL-EDUCATIVE INSTRUCTION AND THE SO CALLED MORAL-EDUCATIVE MATERIAL.

The one-sided consistent working out of the idea of concentration has led, as is well known, to the so-called moral-educative material and instruction (Gesinnungs-Unterricht); that is, the selection of certain material which is taken from some particular but important culture epoch of mankind. The consequence of this is that the pupil should be brought to experience the principal turning points of the culture historical development of the human race; these turning points or epochs should furnish at the same time the subject-matter for the other studies which are to be treated in dependence upon the former and in connection with it. To serve as materials for concentration of moral-educative instruction the following courses were made out in the Seminar at Leipzic and divided up among the eight school years:

- 1. The Fairy Tales.
- 2. Robinson Crusoe.
- 3. The History of the Patriarchs (the enlarged family).
- 4. The Heroic Age.
 - a. The History of Moses and the Judges.
 - b. Thuringian and German Heroic legends.
- 5. The Age of Kings.
 - a. In Israel.
 - b. In Germany; Charles the Great, The Saxon Emperors. Henry I, and Otto I.

- 6 a. The Life of Christ Intermingled with that of the prophets in Israel.
 - b. Barbarossa and the Crusades.
- 7. a. The Lives of the Apostles.
 - b. The Spread of Christianity in Germany.
 - c. The Discovery of America.
- 8. History of the Reformation, Frederic II.

 The Wars of Freedom (Against Napoleon) Hermann and Dorothea.

Objection has rightly been made against the name moral-educative instruction (Gesinnungs-Unterricht) also against the succession of topics or the succession of steps that they do not at all exhaust the entire culture historical content; and against the selection of materials that it is arbitrary. (See the criticism which has been made within the Herbart school itself against these materials. In the Jahrb. f. w. P. IX, p. 113, etc., and Rein das 5 Schuljahr, p. 116 etc.). It must be admitted first of all that the subordination and the association of the remaining subjects (arithmetic, geography, natural science, etc.), with these concentration materials are not only forced and impracticable but they contradict even the nature of concentration and may lead even to a decentralizing, a tearing asunder of the connected culture materials which are already present in the single subjects of instruction, and we, together with Stoy and all the other reviewers who have touched upon this matter, protest against the introduction of such moral educative instruction into the secondary schools. But one should not allow himself to be controlled by preconceived notions, so that he disposes of this one-sidedness in an equally one-sided way. Very weighty and valuable thoughts for our secondary schools are involved in the proposal of such important material of concentration from the epochs and turning points of historical development, and the firmness with which these materials of concentration are fitted together can command respect even though we may not approve of the building itself. The important thing is to sift out what is valuable in this fundamental thought and to exclude the worthless. "Those studies which have been begun and carried on through instruction and everything which has given employment to the boy must have a value for the higher stage of development for the youth and man so that he can ever return to it with new interest or at least may gladly dwell upon it in memory. And with the view that this shall be rendered possible the subjects of

instruction are to be selected and treated." (Ziller Grundl., p. 282). "Nothing should be learned, memorized, or presented which has only a momentary or transient worth." (Nordhausen Korref. in agreement with Kern, p 29.) Compare with this a word from Herbart cited by Stoy: "It will appear that the effort to combine everything toward a single point is just as damaging to the teacher as on the other side the breaking to pieces and tearing asunder of what belongs together has become hurtful."

As to the selection, therefore, let there be no ragout of empty and spiritless sentences as in Spiess, Ostermann, Hennings, Ploetz's elementary books—the most stupid of all books with which to torture the youthful spirit. No childish stories and narratives as in a majority of our French and English exercise books, but great connected materials, "historical and poetical masterpieces which in a genuinely classic fashion preserve their value, not only for all times and peoples, but for persons of all ages." (Kern, par. 29.) Therefore, no fragmentary collections, but authors; instead of German reading books, complete masterpieces of German literature.

But here, also, still higher and broader points of view are necessary in the selection, than for example "that this or that selection is very interesting," in reality out of the best, only the best. Therefore, not such hoary material that it will find no inner relation to the youth as Cicero's De Senectute, not material taken from the old age of nations, as Lucian, or from the age of the Roman commonwealth, which our pupils should make the acquaintance of from the Catilinian, Philippian, and other orations, but rather the great periods of Roman heroism (Livy). Therefore Curtius, with his world material in the deeds of the youthful hero Alexander, who is a favorite of the youth, should not be so easily set aside. And so there is something in an Odyssev, a Livius stage, (Kern and Willmann, Padagogische Vorträge). we do well to make use of such materials, when it is at hand, as in the reading books from Homer and Herodotus, by Willmann, or to search out other new ones as they present themselves, as for example, Archenholz's Seven Years' War for Tertia b, Schiller's Thirty Years' War for Tertu a, provided one understands how to gather out of these works a well connected series of great and important pictures.

The worthlessness and wretchedness of the usual elementary exercise books in foreign languages a la Spiess, Osterman, etc., has been exposed by Guenther in the Year-Book f. w. P. XIII, p. 149,

especially p. 172, with such crushing criticisms that no one can longer ignore the facts. Moreover, a healthy reaction has already set in in the elementary books of Perthe, Barth, Cyranka, Meurer and others. We should follow the example of the common school which has put itself in possession of the Robinson Crusoe story, and following upon the Robinson primer has made reading books out of the Crusoe story for the third year. But even when the richest materials are at hand oftentimes almost pure accident or thoughtless caprice of the teacher seems to rule. When, for example, in Herodotus not the whole of the Persian wars in one survey, but Book I or II is taken; in Livy not the period of the kings and the second Punic War in connection; in Virgil, not first of all Books II and IV, but far less important materials are chosen, if only the teacher thereby gets a little variety. In the reading of Ovid one seeks to establish not a well-connected cycle of typical biographies, but allows the given order to control.

And even those materials of instruction which lie at hand are not sufficiently utilized, as a glance at the programs of our secondary schools shows. When, for example, the Greek readings in prose and poetry for the same class, or when the treatment of Homer and of Horace in a divided Prima lies in two different hands, and when, instead of careful planning, accident determines whether the readings shall be simultaneous or in succession. And yet, with little trouble the happiest combinations for a fruitful concentration may be brought about in many ways; for example, in reading Xenophon's Anabasis, Curtius' March of Alexander, the Acts of the Apostles, with the journeys of St. Paul upon the same theater of action which the history of the crusades in the same class brings to mind as a simultaneous group of lessons for Tertia,-Greek history and readings of its grandest events in Herodotus and in Xenophon's Hellenics, likewise Roman history and readings from Livy in Secunda. Finally in Prima such concentration is provided for by a combination of deeply related material in succession (three semesters) the three events of Athenian history by which the fall of Athens was brought about, the Sicilian expedition, the death of Socrates and the overthrow of Hellenic freedom (readings from Thucydides' The Apology and the Olynthian and Philippian orations of Demosthenes, presenting at the same time the models of three kinds of style, historical, rhetorical, and philosophical prose or even by means of parallel material rich in relations, for example, readings from Tacitus' Annals, Genesis, and the beginning of the Old (German) Empire, and from Horace c. Book IV, Praise of the New Dynasty)

In this latter class (Prima) the most fruitful concentration may be secured if the German and Greek instruction lies in one hand in such a way that the pupils, even in divided Prima, are conducted by the same teacher through the two courses. The two years' instruction in Prima must be conceived as one closely related whole. The entire Greek prose and poetic readings of Prima constitute in themselves a closed circle. And likewise, also, the lessons of the German instruction; these circles again must be so selected that they can be brought into relation with one another, both within the same semester and within the year's course, and finally in the two years' course, so as to form a unit whose members stand in such mutual relation to one another that the different generations of pupils from their different standpoints at the end of their course, conditioned upon their time of entrance, may receive the impression of a whole

While, therefore, we do not connect with the German instruction a philosophical propadeutic, but rather a full discussion and working over of a limited number of great fundamental concepts (complete definitions) which, partly by way of preparation, partly at the same time, and partly afterwards, should deepen the understanding of the remaining subjects of instruction in this way we have brought about within these two branches of study a sort of philosophical completeness and culmination which, according to the reviewer from Pforte, would be the outcome of the requirements of Herbart in gymnasial instruction. Compare also Ziller, Vorl., p. 134, whose wishes, however, go too far.

The table on next page will show more plainly what has been said. This table shows that, besides the notion of the beautiful and of art, two cardinal ideas run through the whole work (Prima); the idea of honor and of tragedy whose understanding like that concerning the nature of habit and culture refer back to a deepening of the notion of the personality which is most important for the entire work of moral educative instruction.

How numerous, or rather how numberless, indeed, are the connecting threads which run back and forth from one object to another, and from one semester to another, only the teacher who stands in the midst of instruction is fully conscious. For example, the kinship of thought between Thucydides III, 82, 83; Demosthenes' Philipp. I and

THE	DIDACTIC PRINCIPLES	OF HERBA	I <i>RT-ZILLER-ST</i> C) y 169
PROSE READINGS	Thucydides. (1), Larger Historical section: as, The Sidi, Exp. Also (2), The Funeral Oration of Pericles, and, as coun- terpart, II, 82, 83. Fi- nally, as a frame for the whole, I, C., 1, 21, 22. The Confession of Thucydides in regard before.	Demosthenes' Philipp. In III, Notion of honor: Hour of the State and of the Nation,	Plato's Apology and Criton (Kinship to Thucyd. III, 82, 83 and Demosth.'s Philipp.	Plato, Phaedon
READINGS IN THE PORTS	Ihad I-VI (Honor of Achilles Compare 1, 352, etc., and 505, etc., Metive for Sophocles' Apar. In 1, 189, etc.)	XII. 2) Soph. Ajax (reference to Hero honor destroyed by one's own	Hind, XIII-XVIII. The appearance of the Tragic in the fate of Patroklus.	Iliad, XIX-XXIV. (The appearance of the Tragic in the fate of Hector.) Soph. Anti-Hector.) Soph. Anti-Hagedy.)
STUDY OF NOTED WORKS	1) The so called Jupiter of Otricoli Ji. I, 528, etc. 2) The Juno of Ludovi. 3) Die rondanioische Meduse, Ji. II, 447 V, 738 XV, 308. 4) The so called Germanneus. (Hermes als Redner Ji. III, 216.)	Lackoon (as representation of the tragic).	1) Apollo Belvedere Jl. XV, 318, etc. 2) Meneiaus and Pat- roklus group. Jl. XVII.	The Abbey Church at Lauch according to the picture in Luch's collection.
STUDIES IN THE HISTORY OF	Survey of the growth of German Literature from Luther to Klopstock inclusive. (The kinds of poetic Art, Histor, Song, Secular Folk Song, Religious Song, Poems of Animals—Connect, with 1 (1))	Lessing. Especially in tull Laokoon. Minna von Barnhelm (relative and absolute honor). Em. Galotti. The Tragic;	Goethe. Especially in full; Goets von Berlich. (Reference to hero honor destroyed by tragic gull). Compare Soph. Ajax—Eg. mont, Iphigenie. (The Tranc)	Especially in full Wallenstein. (The Tragic, kinship of Wallenstein and Egmont, Notion of Honor in Butler.)
COMPLETE DEFINITIONS	Concept. 1) Of the beaunful, chiefy the art of Poetry. 2) The writing of History.	1) Notion of Bonor. 2) Oratory (with reference to Cicero de Oratore).	1) Nature of Custom. 2) The Nature of Education.	Tragic. 2) Of the Soul (deduced from discussions of the Phaedon.)
Paries	L. Sem. Summer	II. Sen.	III. Sem. Summer	IV, Sem. Winter

111; Plato's Apology (in all of which the brittleness and dissolution of Hellenic life appear, ordows); the kinship of the theme Goetz v. Berlich, and in Sophocles' Ajax (the hero's honor being destroyed by his own guilt); the character of customs and modes of burial in Book II, 23 and 24; Soph. Ajax, Thucyd., II, 34, Plato's Phaedon, etc.—even between such apparently heterogeneous objects as Schiller's Wallenstein and the Laokoon group (see Henke, group of Laokoon Leipzig, 1862, p. 63).

In a single semester an example of the strictest concentration around a central point, the notion of honor would be given: definition of the same; the reading from Minna von Barnhelm (overstrained notion of honor) of Sophocles' Ajax (destroyed hero honor), and of Demosthenes (honor of the state)—and in this manner we regard the fundamental idea in the proposal of so-called moral-educative material as still fruitful and as applicable in the higher schools.

THE STATICS OF INSTRUCTION.

While we, therefore, being tied down first of all, to give conditions, declare ourselves in agreement with Stoy, p. 67, who, in the place of moral-educative instruction, has set the statics of instruction; that is, a well-ordered variety of readings which has to solve the problem of the importance of each single branch of instruction and of restoring the equilibrium among them all, we go somewhat beyond him in his own very strongly emphasized requirement of a stringent and intensive concentration. We desire within the different groups of the given materials of instruction, and between the single and associated grades, a searching out and setting forth of certain centers, and would regard it as one of the most important and fruitful undertakings if, with this in view, and from the standpoint of such concentration, the course of study in the given branches could be sifted out and revised; far be it from us, however, on the ground that perverted and indistinct ideas are associated in some quarters with the notion of concentration, that we should agree with Schrader (Erstehungslehre, p. 194), that we should cease to use this term altogether. On the contrary, we regard it as very important that concentration in all grades, as well as in the whole system of instruction in all single subjects of study, as well as in their entire organization, should be impressed upon teachers with the greatest possible emphasis. The defect and the necessity for a close concentration in our present secondary schools, are acknowledged by many

of the reviewers. "Although the gymnasium has an advantage over all other educational institutions because in antiquity, it possesses a material as the center of moral-educative instruction which, by reason of the simplicity of all its relations, the primitive condition of society and of government, and the perfect form of its works of art, in the one case typical, in the other, as it were, a model for all times, and is adapted as no other material to the awakening of a many-sided interest; and although the gymnasium in the upper classes, through the treatment of Greek history in Lower Secunda, of the Roman in Upper Secunda, and the final inner connection of the present with classical antiquity in Prima, makes possible a concentration of the moral-educative material as it could not better be imagined, still, unfortunately, this striking advantage is lost for the whole result of instruction, because the preparatory instruction of the preliminary grades, by reason of its motley variety, its defect on concentration and inner relation among the subjects of study, does not supply the necessary unity for a scientific and moral foundation."

At the most, the German composition, when it is convenient, more by accident than by definite plan, assumes almost alone the mediative work of concentration (Muhlhausen Ref). A very deserving attempt to carry out a strict concentration by associating related natural-science subjects, geography and physics, with the other naturalscience instruction; and of geographical natural-science instruction, with that in German history, mathematics, and drawing, is given by W. Zopi (In der Zeitschrift f. G. W., 1881, p. 417, etc.; 1882, p. 273, etc.; 1873, p. 92, etc). In the latter of these papers is his demand - and he shows how it can be fulfilled in a practical way, without difficulty, under given conditions—"that the connection between the geographic-natural science instruction and all school studies related to it, even in a remote way, should exhibit itself in school life far more perceptibly than has heretofore usually been the case. He understands this more particularly thus: That the courses of study for these branches, that is, for nature-study and geography, for German, history, mathematics, and drawing, shall be so arranged that not only each one by itself, while limited as much as possible in its material, should present a simple, but close and well-articulated and methodically-arranged whole in its development, but that they also show up clearly a harmonious interlacing of the particular lessons of all the enumerated studies both with relation to the material and the method of treatment."

Among the single propositions pointing to concentration, we mention that of the reviewer from Halle (Latina), that the zoology in the lower stages of Quarta be treated as animal geography. Stendal Kizsets up the following thesis: It is desirable that these principles of Herbart-Ziller-Stoy, as in their application to the secondary schools they have found their general and easily intelligible expression in Kern's Outline of Pedagogy, after being illustrated by a skillful hand, through the working out of special lessons and programs, should be brought nearer to the popular understanding and made useful in practice.

As to further discussion of these points we may refer to the article on this first thesis, p. 10, and pass by, according to our limitation of the subject, the question fully discussed by some of the reviewers concerning the static relation of the historical to the natural-science subjects. Of the ancient languages to the other subject, etc., we remark only that the effort of Herbart, followed also by Ziller, to set aside the ancient languages in gymnasial instruction is not approved by other pedagogues of this school (see Stoy, p. 309, Kern, par. 21, Willmann, Padog. Vortrage, p. 103); that Kern, however, (§ 18) rightly gives the historical side of instruction the preponderance; for, although they are thoroughly suited in themselves to promote the aim of moral educative instruction, still the languages should clearly serve the youth, in the first place, as a means of representation for the expression of that which interests them. They should serve first of all a knowledge of historical life, for moral-educative instruction works, with the resources of history, so far as they make the developing human being historical, lift him with a rapid movement to the height of the present, and, in a certain manner, permit the individual in the brief years of his youthful receptivity to run through the course which the human race, in the march of thousands of years, has traversed with pain and conflict (Willmann, Didactic, p. 72).

We will only refer with great brevity to three points:

t. To the question of concentration belongs the forming of the daily program of studies. "Not only Ziller and Stoy, but Herbart himself speaks with great bitterness of the thoughtless and unsystematic arrangement of the hours of study and of the branches of instruction in the prevailing programs which seem to be projected for the most part upon the principle of variatio delectat. The programs as plans for organizing the opportunities of moral-educative instruction must be organisms, not aggregations.

When in a class, within a few hours one after another the most beterogeneous things are studied, for example, reading from Cæsar, modern history, Ovid, mineralogy, Greek grammar (compare Pad. Vorles, par. 133), it is impossible that the interest of the pupils should be kept alive; but this is in fact a sin against the simplest laws and requirements of psychology, which teaches that ideas which have been checked by other ideas become unconscious and only by means of a continuous association, by building up series and groups of ideas, a real interest and a permanent, effective circle of thought can be attained." (Rossleben Ref.) A complete removal of this wrong status is impossible, but a diminution of it is thoroughly necessary. That the programs are often projected in a wholly mechanical way, and seldom organically constructed, is a fact. But as certain of the reviews properly demand the teacher should have the freedom and should make liberal use of it within the range of studies which lie in a single hand, after estimating the importance due the single subjects, to make modifications or adjustments, as, for example, to use the German period for a special furtherance of the Greek readings, and vice versa. Moreover the parallel readings from different authors in the same language should be changed as often as possible into a succession of readings.

2. The proper concentration in the instruction of the lowest classes, Sexta and Quinta, requires the joining on to the treatment of topics in the preparatory school (Halle St. G. Ref.). In the public school generally "teachers are under obligation to the children in this matter; such a sudden breaking off of the many idea complexes thus far worked over, and an attempt to build up in a totally different manner upon unsafe foundations, must be decidedly detrimental to the children." (Wernigerode Ref.) "It is much to be regretted, that in these classes the nine Latin and four French recitations with their dearth of good reading material, in connection with the recitations in arithmetic and writing, have pushed into the background the educative material offered in religion, German geography, and also in history" (Pforte Korref), and that the proper concentration is most difficult at that point where it would be most needed. But this defect becomes most perceptible, because of the very striking contrast to the close concentration in the elementary school from which the children come; a partial relief lies in the fact that not the youngest and most inexperienced candidates (for teaching) are entrusted with instruction in Sexta and Quinta, but as often as possible Normal trained teachers and those whose powers have been tested in common-school instruction.

3. For an effective working out of concentration there is first of all necessity among teachers for a certain common agreement as to the pedagogical standpoint obtained from the study of pedagogical theory. The appropriation of what is valuable in the principles of Herbart-Ziller-Stoy could only be helpful in such a close drawing together of different teachers.

But the chief work of concentration is an inner one, and falls to the essential work of instruction. Herein appear special peculiarities of the didactic principles of Herbart-Ziller-Stoy. To present them fully and in detail in this place would be impossible. The quintessence is given in Kern's presentation, to which reference is made, only the quintessence of this quintessence can be suggestively called to mind in a few sentences.

ARTICULATION OF INSTRUCTION.

Method Units.

"The subject-matter of instruction must be organized out of many articulated parts; to treat it in a running series would be wholly unpedagogical. It is to be broken up according to necessity into smaller sections for one, two, or three recitation periods" (Willmann Padag, Vortrage, p. 81).

"In every single branch the subject-matter should be carefully ordered and divided up into unities, and it should not be heaped up in masses or in encyclopædic fashion (Liller, Vorl., p. 280). It is necessary that the material offered to a pupil should not overwhelm him, nor should it appear to him as a drop in a boundless sea; it must be offered in well rounded form (Nordhausen, G.) and dealt out one topic at a time." The single sections requiring a series of recitations should be reproduced by a summary before the transition to what follows.

Such unities offer themselves freely, for example, a longer or shorter poem; the exploit of a hero in the *lliad*, a single historical picture in the historian, etc.

This requirement is self-evident, but it is by no means always observed in practice, least of all when it is most needed, in historical instruction. At any rate the Persian wars, the second Punic War, and



THE DIDACTIC PRINCIPLES OF HERBART-ZILLER-STOY

the Thirty Years' War, would be divided up into sections, the rest seldom.

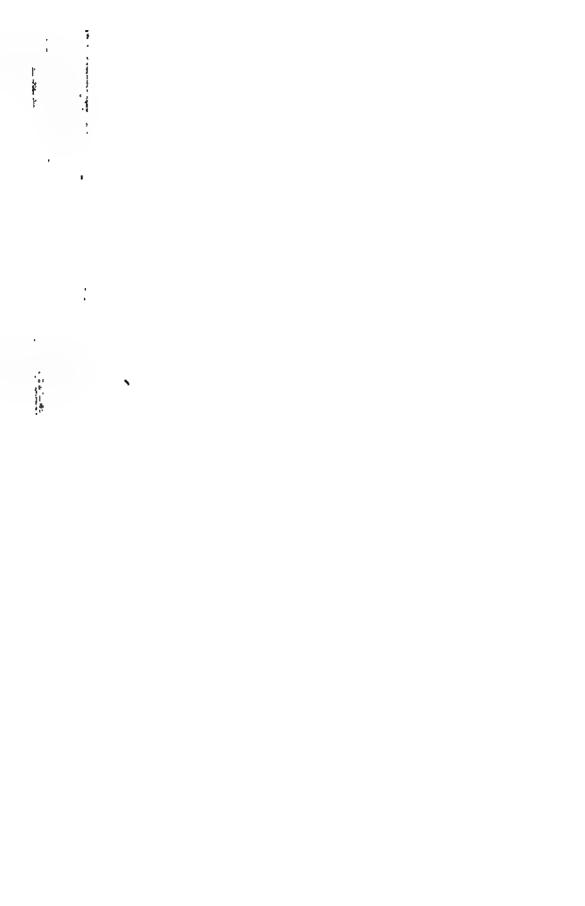
An example of sectioning a topic.

The Spanish War as a unit in the larger unit of the second Punic War.

- I. War of the two Scipios, 218 to 212.
 - a. The Spanish War in the narrower sense.
 The advance of the Romans to the Ebro.
 The land of the Ebro as a basis of operations won.
 - The Spanish Carthaginian War.
 The advance of the Romans to the south coast.
 - c. Backward movement until the fall of the Scipios, 212.
- II. The war of P. C. Scipio Jun, 211 to 206.

His advance

- a. To the battle of Baecula, 208. Hasdrubal sent to Italy.
- b. Till the completion of the subjection of Spain, 206.





THE

FOURTH YEARBOOK

OF THE

NATIONAL HERBART SOCIETY

FOR THE SCIENTIFIC STUDY OF TEACHING

PREPARED FOR DISCUSSION AT THE WASHINGTON MEETING OF THE NATIONAL EDUCATIONAL ASSOCIATION

1898

EDITED BY
CHARLES A. McMURRY
THE UNIVERSITY OF CHICAGO

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THE UNIVERSITY OF CHICAGO



THE FOURTH YEARBOOK of the National Herbart Society contains papers on the Ethical Value of Knowledge, on History and Geography, and also the Discussions of the Chattanooga meeting.

These papers will be freely discussed at the two sessions of the Herbart Society, to be held at the City of Washington on the afternoons of Friday and Saturday, July 8 and 9, at three o'clock, in Foundry Church, Fourteenth and G streets.

The members of the Society and all those interested in these papers should read them carefully before going to the Washington meeting of the N. E. A.

It is suggested that local clubs arrange one or two meetings in June for the reading and discussion of this Yearbook.

Many teachers have inquired about some definite course of readings in the pedagogy of Herbart.

Such a Course of Study is carefully outlined with book-references at the close of this Yearbook. A statement is also given of the organization of the Herbart Society and of the terms of membership singly and in clubs.

The Yearbooks may be ordered of the Secretary.

CHARLES A. MCMURRY.

THE UNIVERSITY OF CHICAGO, Chicago, Ill.

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THE FOURTH YEARBOOK

THE RELATION OF KNOWLEDGE TO WILL AND CONDUCT.

By JAMES SETH, M.A., D.Sc. Cornell University, Ithaca, N. Y.

The older view of education as exclusively intellectual, or as consisting merely in the increase of knowledge, is giving place to a view which conceives it as chiefly ethical, or as consisting in the development of character. To this change of view two main causes have contributed: (1) the growing tendency to substitute society for the individual as the educational unit, and (2) the new insight, which a more scientific psychology has provided, into the unity and continuity of the mental life.

The first of these causes has resulted in a deeper appreciation of the significance of character and conduct from the point of view of society. The social estimate of education is based upon the contribution which it makes to the social efficiency of the individual, the additional value which it gives him as a member and servant of the social body. To society it does not matter what a man knows, but only what he does and what he is. Only, therefore, in so far as his knowledge influences his character and his conduct, only in so far as what he knows finds expression in what he is and does, is society interested in his education. Accordingly, as we have learned to think of the individual less as an end-in-himself, as an isolated and independent unit, and more as related indissolubly to society and subject to its imperative claims, the value of knowledge for its own sake has been subordinated to its practical value—its significance for character and conduct, for action and life.

Psychology, moreover, has taught us that, as the individual life is not adequately judged when it is separated from the larger life of society, so the intellectual powers are not truly understood, or their function duly appreciated, so long as they are separated from the "active powers"; that the solidarity of the several mental elements is no less real and important than is the solidarity of the several individuals. As we have come to regard the individual as a part of the larger social whole, so we have come to regard the different "faculties" of the individual mind as inseparable parts or aspects of the mind itself, the only psychological whole or unit. And here again we have learned to subordinate the intellectual to the practical, to regard knowledge as instrumental to life, and to take life itself as the measure of the value of knowledge. For the knowledge which has no practical value, which finds no expression in action, we have lost our elder reverence. More and more we are utilitarians in our educational judgments and values, although our utilitarianism may be of a lower or of a higher order; less and less do we laud and take interest in the things of the mind and intellectual culture for their own dear sake.

In the following paper I desire to indicate both the truth and the error of this social, practical, utilitarian, or—as it is apt to call itself "ethical" estimate of knowledge. It is part of my purpose to show that, in a deeper sense of the term, the ethical function of knowledge is not exhausted by its practical application, but includes also its pursuit as an end-in-itself, as a thing of essential and intrinsic and not of merely instrumental value. For, in our escape from the one extreme of a scholastic and academic intellectualism, we are in danger of falling into the other extreme of a practical and utilitarian Philistinism. And the second of these is hardly less pernicious, from an educational point of view, than the first. Both errors find abundant illustration in the history of human thought.

That all knowledge has a practical utility and social value, that the end of knowledge hes beyond knowledge, and is to be found in the field of activity and life, is indubitable, and may be very easily shown. I do not know any clearer or more persuasive statement of this profound psychological law than that of Professor William James in his recent volume of essays entitled, The Will to Believe. It may be said to be the thesis (or one aspect of the thesis) of the entire volume, and it is the explicit subject of the essay on "Reflex Action and Theism." "From its first dawn to its highest actual attainment, we find that the cognitive faculty, where it appears to exist at all, appears but as one element in an organic mental whole, and as a minister to higher mental powers—the powers of will. Such a thing as its emancipation and

absolution from these organic relations receives no faintest color of plausibility from any fact we can discern. Arising as a part in a mental and objective world, which are both larger than itself, it must, whatever its powers of growth may be remain a part to the end. This is the character of the cognitive element in all the mental life we know, and we have no reason to suppose that that character will ever change. On the contrary, it is more than probable that to the end of time our power of moral and volitional response to the nature of things will be the deepest organ of communication therewith we shall ever possess. This is nothing new. All men know it at those rare intervals when the soul sobers herself, and leaves off her chattering and protesting and insisting about this formula or that. In the silence of our theories we then seem to listen, and to hear something like the pulse of Being beat; and it is borne in upon us that the mere turning of the character, the dumb willingness to suffer and to serve this universe, is more than all theories about it put together. The most any theory about it can do is to bring us to that. Certain it is that the acutest theories, the greatest intellectual power, the most elaborate education, are a sheer mockery when, as too often happens, they feed mean motives and a nerveless will. And it is especially certain that a resolute, moral energy, no matter how inarticulate or unequipped with learning its owner may be, extorts from us a respect we should never pay were we not satisfied that the essential root of human personality lay there."

To separate knowledge from life, intellection from volition, is to abstract a part from the whole, and to attribute to the part, in and for itself, a value which it possesses only in its indissoluble relation to the whole. And in the hierarchy of mental elements, in the constitution and economy of human personality, intellect and knowledge exist for the sake of will and its practical activity, not vice versa. Man is primarily and characteristically an active being, a doer, and only indirectly and secondarily an intellectual being, or a knower. Knowledge is power, it is not an end-in-itself. Its function is to minister to better living. The good will alone has value in and for itself. The value of knowledge depends, like the value of all else, upon the character of the will that uses it. In the hands of the bad will, knowledge is an evil; in the hands of the good will, it is a good.

The view which the scientific mind is apt to take of its own function

[.] The Well to Believe, pp. 140-142.

is the opposite of that reached by such a psychological analysis. Ever since Bacon and Locke the scientific ideal has been, with more or less modification, the Baconion and Lockian ideal of passivity and mirrorlike reproduction of objective reality. "The mind must be a passive, reactionless sheet of white paper, on which reality will simply come and register its own philosophic definition, as the pen registers the curve on the sheet of the chronograph." "Of all the cants that are canted in this canting age," says Professor James, "this has always seemed to me the most wretched, especially when it comes from professed psychologists. As if the mind could, consistently with its definition, be a reactionless sheet at all! As if conception could possibly occur except for a teleological purpose, except to show us the way from a state of things our senses cognize to another state of things our will desires! As if 'science' itself were anything else than such an end of desire." " It is far too little recognized how entirely the intellect is built up of practical interests." The different sciences are, in truth, but the several chapters "in the great jugglery which our conceiving faculty is forever playing with, the order of being as it presents itself to our reception. It transforms the unutterable dead level and continuum of the 'given' world, into an utterly unlike world of sharp differences and hierarchic subordinations, for no other reason than to satisfy certain subjective passions we possess."

This doctrine of the practical or teleological character of knowledge is stated by the same author in his Principles of Psychology, with special reference to conception. The translation of the perceptual into the conceptual order of the world, it is there maintained, "always takes place for the sake of some subjective interest." "The conception with which we handle a bit of sensible experience is really nothing but a teleological instrument. This whole function of conceiving, of fixing, and holding fast to meanings, has no significance apart from the fact that the conceiver is a creature with practical purposes and private ends." My thinking is determined not by the necessity of the facts themselves, but by "the necessity which my finite and practical nature lays upon me. My thinking is first and last and always for the sake of my doing." While "the reality overflows these purposes at every pore," it were idle for us to attempt to grasp that reality in its totality. "Our scope is narrow, and we must attack things piecemeal, ignoring

^{*} The Will to Believe, p. 129. * Ibid., p. 84. 1 lbid., pp. 129-130.

Principles of Psychology, vol. 1, p. 482. 1 Ibid., vol. 11, p. 383.

the solid fulness in which the elements of nature exist, and stringing one after another of them together in a serial way, to suit our little interests as they change from hour to hour." It follows that "the only meaning of essence is teleological, and classification and conception are purely teleological weapons of the mind."

Put in this way, the teaching of psychology would seem to coincide entirely with the teaching of the active and practical instinct in human nature. The practical man is always a utilitarian; knowledge is for him an instrument of activity, a "teleological weapon," a means to an end, not an end-in-itself. Even science has, in his eyes, only an instrumental value, which lies in its application to the business of life, in its ministry to social convenience. Such also is the ordinary man's view of the value of education. What is education, he asks, but a preparation and equipment for the business or professional career? The measure of its value is for him the degree in which it fits a man to take his place and do his work in the social order of his community and age. In the knowledge which is irreducible (in reality or in appearance) to terms of life, in the theory which finds (or promises) no application to practice, the ordinary practical man who claims to represent the practical "common sense" of humanity itself—recognizes no value at all,

This is our "common sense." But it has not always been and it is not now everywhere, the common sense of mankind. It is the common sense of the western, as opposed to the oriental world; of the modern Christian, as opposed to the ancient Pagan (especially Heilenic) world. The oriental mind has always (for it does not change its view any more than its life, as the western mind does) found its ideal in inactivity, rather than in activity, in rest rather than in movement, in death rather than in life. Its evaluation of knowledge is that it leads to the quiescence and cessation from the effort to do and to be, which comes with the discovery of the illusoriness and futility of all finite existence. For it the path of salvation is the negation of the will to live, the value of knowledge is that, by its penetration of the illusions of life, it saps the springs of activity. Even this, it may be argued, is after all a practical estimate of knowledge; it is only the western estimate reversed. While we hold that knowledge is the minister of life, the oriental mind holds that it is the minister of death; while we laud its positive service to the development of will, they laud its negative service in the destruction

^{*} Principles of Psychology, vol. u. p. 334.

^{*} Ibid., vol. u, p. 335.

of will. Its value is still instrumental and teleological, although the purpose is so different. And this is true. It leads, however, to a depreciation of knowledge of which the practical western mind never dreams. For the office of knowledge is to lead us not to activity and self-affirmation, but to passivity and self-obliteration. The life of will to which knowledge leads us is continuous with the intellectual life, inasmuch as self-consciousness is the mark of both. The will-less state, on the contrary, is the selfless state; and since the continuance of the intellectual life means the perpetuation of self-consciousness, knowledge becomes the enemy, as it was formerly the friend, of man's true welfare. The sum of human wisdom hes in the discovery of the futility of the ends of finite activity, of the illusoriness of all finite existence. Intellect points beyond itself, not to will, but to feeling; and we must cease from thinking as well as from willing, from knowing as well as from doing, if we would win salvation.

To the Greek, on the contrary, as distinguished both from the oriental and the modern western world, knowledge seemed to have an intrinsic value, to be an end-in-itself, nay, the supreme good, in comparison with which the life of feeling appeared irrational, and even the life of practical activity seemed inferior and not entirely worthy of a rational being. The characteristic function of man - that which differentiates his life from that of the animal and allies it to the divine life itself-is for the Greeks the activity of thought. This is that actus purus into which there enters no element of passivity, and in the exercise of which man asserts his independence of external conditions and becomes sufficient unto himself. So far is this life of thought from deriving its value from any overt or practical activity to which it leads that, by its very nature, it is self-engrossed and never points beyond itself. The practical activities - what we call the life of conduct or will - are regarded as distractions from this high occupation of the mind with truth. The business activities—even philanthropy and politics and the entire civic life - are relegated to a lower plane; they are the inevitable result of the composite nature of man, partly animal and irrational, and only in part rational, and the large space they cover in human life leaves but a narrow field for the discharge of man's proper business and true spiritual avocation. It is with a grudge that so much of the energy of reason is sacrificed to the less worthy ends of practice. The true life of the cultured Greek is the life of culture itself, and the highest form of culture is the scientific and philosophic form, the pursuit and contemplation of truth. What gives life value is the intellectual leisure which is purchased by its civic activities; these are the means, that is the end.

This estimate is exemplified not only in the Greek depreciation of what we call "businsss"—a depreciaton which is not less intellectual than social in its origin and significance - but also in the Greek appreciation of philosophy. For the cultured Greek, who had ceased to believe in the gods of the old religion, philosophy took the place of religion. So far was he from separating thought from life, that he found in thought the best and highest form of life. This view finds expression in the Socratic identification of "virtue" with "knowledge," and in Socrates' conception of his mission and service to his fellows as no less ethical than intellectual. It finds expression also in Plato's account of education as a process which gradually weans the soul from the love of illusory appearance to the love of essential reality, and culminates in the contemplation of that which is at once the ultimate good and the ultimate truth of the universe. It finds expression in Aristotle's differentiation of "intellectual" from "moral" or "practical" virtue, and in the supreme value which he assigns to the speculative and intellectual life. The highest and the true happiness of man consists, according to Aristotle, in the exercise of reason, the highest and the true function of human nature; the highest and the true excellence of man is excellence of intellect. It finds expression, finally, in the Store identification of happiness or well-being with "wisdom." although the Stores are apt to praise wisdom rather for the peace and rest which it brings to the soul wearied with the perturbations of a mean and disappointing world, than for its own intrinsic worth as the best and worthiest of human activities. The Stoics have lost the old objective interest in truth for its own sake; and though they still seek salvation in the old Greek way, it is the subjective effect of wisdom rather than wisdom itself that they pursue. Yet in their insistence upon the essential and exclusive dignity of the life of reason we cannot fail to recognize the old Greek point of view.

That the other estimate of knowledge, as instrumentally rather than intrinsically valuable, was struggling for expression in the Greek consciousness, is evident from the place which it finds, alongside the estimate which has just been described, in the ethics of Plato and Aristotle. Plato insists that the salvation of the state implies the rule of the philosopher, and that it is the duty of the philosopher to render this service

to the state. Although the philosopher has learned, with the discovery of the true riches of wisdom itself, the worthlessness of the ordinary civic life, yet he must be compelled to sacrifice in a large measure his own highest life that the life of the many may be rendered less unwise. The recognition of this obligation lying upon the philosopher to use his wisdom in the interests of civic order implies that, if for Plato knowledge is the only end-in-itself, it is also the grand instrument of social regeneration. And although the Aristotelian point of view is more individualistic than that of Plato, yet Aristotle also recognizes the interplay of the intellectual and moral virtues. In the intellectual virtue of "prudence" (or practical, as opposed to speculative wisdom. φρόνησις, as opposed to σοφία), he finds the key to the entire system of practical virtue. "The presence of this single virtue of prudence implies the presence of all the moral virtues." All practical virtue is an expression of intellectual virtue, although not all intellectual virtue finds practical expression.

The ethical inadequacy of intellectualism is strikingly illustrated in the rationalistic ethics of Kant. Kant tries to identify reason and will, thought and activity, in the conception of "practical reason." Logical consistency, conformity to the canons of pure reason, fitness for law universal in the realm of intelligence, that is for him the criterion of moral validity. The conduct thus prescribed is rather the conduct of the understanding than the conduct of the will. For Kant, as for Aristotle, the ordinary practical life - the life of secular interests and avocations is forever inferior to that life of reason itself, which is essentially a life apart, withdrawn from those activities which have their roots in natural human sensibility. But whereas Aristotle concedes to the latter forms of activity a secondary value, Kant refuses to see in them any value at all. For him the entire phenomenal world is ethically worthless, and the only ends worth seeking are the ends of pure intelligence. The result is an irresolvable dilemma. On the one hand, Kant represents the modern western tendency to find the ultimate measure of value in practice rather than in theory, in life rather than in thought, in will rather than in intellect. He holds that knowledge of noumenal reality is impossible, and that the only solution of the problems of metaphysical thought is a practical solution. On the other hand, he invalidates the moral or practical life itself, no less radically than he has already invalidated the intellectual life. Activity in the

¹ Ethics, VI, 13 (6).

phenomenal world, springing from motives of human sensibility, and directed to ends which cannot be reduced to terms of reason, is, in his eyes, ethically worthless. This effort, by a tour de force, to give reason a practical significance without allowing the practical significance of any activity other than the activity of reason itself, is a conspicious failure. If the intellectual life is not itself alone the sufficient life of man, if the ethical value of reason is to be found in its indispensableness as the servant of the will, we must look beyond reason for the field of its practical activity.

That life is more than knowledge, that conduct is more than culture, is a commonplace of the modern western conscience, a commonplace of ordinary thought which finds abundant confirmation in modern scientific psychology. That knowledge has a practical value, and that, from the point of view of practice, this is its chief value, is no less indubitable. If knowledge is not virtue, in the sense of being its exclusive and sufficient presupposition, if we can "know the better and choose the worse," knowledge is at least one of the presuppositions of virtue. In the light of the psychological analysis of volition into ideomotor activity, we may reaffirm the Socratic position with a new confidence, and say that, while a mere cold idea would be practically impotent, yet no idea is cold and an idea "touched with emotion" or, more accurately, possessing "affective tone," is omnipotent. All purposive or volitional action is, in the last analysis, ideation. The measure of activity is found in the ideas of which it is the expression, in the ideals of which it is the realization. We must still say with the Greeks that virtuous activity is activity "in accordance with right reason," that the true role and standard of conduct is prescribed by the intellect, that knowledge determines life. And, from the practical point of view, "ideas" which find no expression in action, or which do not "move" us, have no value; knowledge which is not a means to practical ends is practically worthless. From the same point of view, however, it might well be questioned whether there are any such ideas, whether there is any such knowledge. Who shall undertake thus to imprison the human intellect within the confines of its own solitary life? Who shall draw the boundary line that separates intellection from action? The solidarity of the various elements in the total life of the self, the continuity and organic unity of that life, the subtle contagion of its every operation, forbid any such separation. The practical significance of knowledge is limited only by the possibilities of knowledge itself.

Even within the intellectual life as such, we find ethical characteristics present. The life of the intellect is at the same time the life of the will. To think is to act, and to act is to attend, and to attend is to choose. Not only is there selection of what we shall think about, but the process of thought is itself a process of selection. The education of the intellect is also an education of the will, and the "higher" intellectual education of the scientific and philosophic life is no less real than the "primary" and "secondary" forms of this education. It is no figure of speech to say that there are "intellectual," as well as more. or practical virtues; that all education, even the most severely intellectual, has ethical significance. Even the recluse whose absorption in the problems of the intellect unfits him for the solution of the practical problems of daily life, reaps from the severe labor of the spirit a harvest of moral as well as of intellectual gain. Strength and purity of will, patience and perseverance and self-sacrifice, candor and generosity, these are some of the fruits of intellectual life. The essential unselfishness and objectivity, the characteristic refinement and nobility. of the interests of the student and the scholar, cannot fail to refine and elevate the character which is consecrated to them.

But after we have thus admitted and emphasized the ethical function of knowledge, we must still ask whether this is its only function Knowledge has a profound practical significance, a subtle and omnipotent influence upon character and will. Is this its only significance? Does this influence exhaust its value? We have seen that, according to Professor James, not only does knowledge determine practice, but practice determines knowledge, in such wise that our subjective needs and desires prescribe the form of our science and philosophy, and find expression in what we call "Truth." How far is this doctrine of the reciprocity of intellect and will a true account of the nature of knowledge? How far can we carry the theory of the "primacy of the will?"

The subtle dependence of the perception of truth upon the conduct of the will is one of the insights of Christianity. "If any man will do his will, he shall know of the doctrine." Knowledge is an act rather than a passive reflection of the universe, and the secret of divine reality is hid from the wise and prudent, and revealed to the pure in heart. Understanding implies sympathy, and sympathy is impossible without a common attitude of will. We must take the right attitude to the universe, we must be in harmony and not at discord with it, if we would

know it as it is. Such an attitude, however, is rather one of objectivity than of subjectivity, of conformity to the nature of things than of dictation by the subject to the object. Not he who doeth his own will, but he who doeth the will of the Father, shall know. The willing which leads to knowing is a willing which itself depends upon knowing; we must know what the will of God is, if we would do it. All that is implied in the Christian view of the dependence of knowledge upon conduct and character, is that since the ultimate Reality is moral, or the expression of an absolutely good Will, it follows that the pathway of knowledge is at the same time the pathway of conduct, that only he who does the will of God can know the content of that Will. But he who puts himself in such living sympathy with the divine reality may hope to know that reality as it really is. The intellectual reward of such obedience of this will is escape from the illusions of subjectivity and attainment of objective truth.

Such an exclusive assertion of the practical function of knowledge as negates its theoretical value, such an emphatic affirmation of its subjective significance as negates its objective validity, invalidates knowledge, and reduces it to the level of mere opinion. The distinction between knowledge and opinion has always been seen to depend upon the objective and ontological significance of knowledge; and the skeptical dissolution of knowledge has always followed as the inevitable consequence of its reduction to subjective opinion. On the other hand, the Socratic discovery of the uniformity of the concept beneath the variety and multiplicity of the percept was the reestablishment of the distinction between knowledge and opinion after its obliteration by the Sophists. And after a similiar dissolution of knowledge into subjective opinion, of "reason" into "feeling," in the skepticism of Hume, the modern theory of knowledge found a new starting point, in the Kantian rediscovery of the object in the subject, of rational uniformity and necessity in the procedure of the knowing intellect.

It is important to note that the skeptical reduction of knowledge to opinion has always been the result of the temporary predominance of the practical over the theoretical interest. The Sophistic skepticism was the result of the lapse from the objective scientific interest in truth for its own sake to a merely practical and technical, or professional, interest in knowledge. The Sophists were not students of science, they were professors of the art of life. Similarly, in the school of Locke we find the keen practical instinct of the British mind gradually

supplanting the theoretical interest. In both Locke and Berkeley this practical interest takes a religious form which is absent from Hume But for each of these thinkers, the philosophic interest centers in life rather than in truth; and for the "knowledge" which Locke reported to fall so far "short" of reality, and of whose complete illusor, ness Hume is convinced, a sufficient practical substitute is found in "opinion." or irrational "belief." If knowledge has a merely practical value, it inevitably loses even that value. If our concern is not to know but to act, then a belief determined by the needs of practice, habitual rather than reflected, conventional rather than independent, quick in is response to changing circumstances, untroubled with critical questions and skeptical doubts, undisturbed by any aspiration after truth and reality, will serve our purpose better even than knowledge itself. Probability, not certainty, is the guide of life. Nay, the more nearly our intellectual processes approximate to those of animal instinct, the more practically effective would they seem to become.

Even in the philosophy of Kant we see the agnostic tendency that resides in the practical estimate of knowledge. Kant's view is that the function of reason is to guide the will, not to know reality. And again the merely phenomenal and subjective character of knowledge—its ontological worthlessness, its theoretical invalidity—does not detract from its practical serviceableness. On the contrary, what is theoretically uncertain becomes practically certain, and intellectual agnosticism becomes the foundation of moral faith. Kant could never have rested content with his agnostic result in epistemology if he had not from the first regarded the intellect as the servant of the will, and been more interested in the practical significance of knowledge than in knowledge itself.

On the other hand, when we interrogate the intellect itself as we find it in the consciousness of the man of science and the philosopher, of the scholar and the student, its invariable and unmistakable answer is that knowledge, as such, has ontological significance, and that its characteristic interest and value are to be found not in its practical results or ethical consequences, but in the attainment of its own inherent purpose—the apprehension of reality, the contemplation of truth. The measure of its value, according to its devotees, is not any subjective influence which it exerts upon the subject of it, but the

A striking recent illustration of the same tendency is found in Mr. Balfot & S. Foundations of Belief, as well as in Mr. KIDD's Social Evolution.

degree in which it corresponds with objective reality itself. Not the subjection of the world to our human purposes, but the desire of insight into the nature of things — disinterested curiosity as to the "What" and the "Why" of them all — is the spring and motive of the intellectual life. The universe is full of meaning — meaning not only relative to us and our practical purposes, but meaning that transcends all these purposes and reveals to us their insignificance — and it is the "proper business" of the intellect to discover that meaning. To deny that there is any such meaning to be discovered, or the possibility of its discovery, is to sap the very springs of the intellectual life.

The abstraction of knowledge from all practical reference, of the interest in the nature of objective reality from all subjective interest in its practical significance for us, is not merely possible, but is the essential condition of the process of knowledge in its stricter sense. The intellectual interest proper, or the interest of knowledge, is an interest in the object itself; not in its uses for the will of the subject, any more than in its affective value. Of course, we may be stimulated to intellectual activity by the spur of practical necessity and the desire of comfort or of adjustment to our environment; and the primitive interest in knowledge is probably of this practical kind. But the historical (or prehistoric) origin of knowledge, and the conditions of its development, do not determine its nature any more than the origin and conditions of its development determine the nature of morality. And until the desire of knowledge for its own sake is felt, until the disinterested interest in the object itself arises in the human mind, the strictly intellectual interest has not begun to exist. The very existence of the intellectual life, therefore, implies leisure from the absorbing cares of the practical life. As the Greeks always seem to have perceived, knowledge is the occupation of a mind at leisure from itself. And if we cannot go so far as to say, with the Greeks, that the provision of this learned leisure is the final raison d'être of all the toil and labor of mankind, we must surely admit that it is one of the things most worthy of our toil, one of the things best worth living for. There is such a thing as "pure science," and, apart altogether from its practical application and its social utility, truth is worth pursuing and attaining.

Doubtless all knowledge is teleological, but its teleology is the immanent teleology of the intellect itself. If the world of science

arises in response to our desires, it is not in response to our practical but to our intellectual desires that it arises. The argument for the subjectivity of knowledge is like the argument for the subjectivity of morality. Because morality results in human advantage, it is argued that it is all a matter of human advantage. But the only way to secure the advantage of morality is to lose sight of the advantage. Similarly the only way to secure the practical advantage of knowledge is to pursue knowledge for its own sake. The intellectual life is no less "paradoxical" than the moral life. The true intellectual interest is, like the true moral interest, objective rather than subjective, although the subjective value of the one is as indubitable as that of the other

The single, comprehensive purpose of the intellect, is to know. In the accomplishment of this purpose it is guided by all kinds of minor purposes, but all these are means to the one constant end - the attainment of truth. It is not by a straight road, but by innumerable and devious bypaths, that this goal is reached; yet it is as the most available path to this goal that each path in turn is chosen. The intellectual life, like the practical, is a selective process, but the purpose which guides the process of selection is not the gratification of desire in general, but only that of intellectual desire; and its gratification consists in the discovery and contemplation of truth. The measure of intellectual importance is found not in any merely subjective end, but in the degree in which our human thought conforms to reality, the degree in which the intellectual process reproduces the cosmic process. Doubtless, in the gradual execution of this intellectual purpose, we abstract one aspect of the cosmos at a time from its other aspects; and as we attend to each in turn, each acquires for us an importance which does not belong to it from an absolute point of view, and which it loses even for us when we pass to another aspect

As we advance in insight, we learn to correct the errors of our abstract and partial thought, and to redistribute the emphasis of attention. This correction is the lesson of the cosmos, whose pupil the intellect is. But in the final correlation of these several aspects of truth, no one will be found to have been without its own peculiar importance. The complete system of truth, if attainable at all, must be written chapter by chapter, and as the volume of knowledge grows the earlier chapters must always be rewritten in the light of the later.

The essential objectivity of knowledge —its growing independence of the will, has been specially remarked by Schopenhauer. "Knowl-

edge generally, rational as well as merely sensuous, proceeds originally from the will itself, belongs to the inner being of the higher grades of its objectification as a mere means of supporting the individual and the species, just like any organ of the body. Originally destined for the service of the will for the accomplishment of its aims, it remains almost throughout entirely subjected to its service; it is so in all brutes, and in almost all men. Yet, in certain individual men, knowledge can deliver itself from the will, throw off this yoke, and, free from all aims of the will, exist purely for itself, simply as a clear mirror of the world." While, in the mass of men, "knowledge remains always subordinate to the service of the will, as indeed it originated in this service, and grew, so to speak, to the will, as the head to the body," yet, "in proportion as, in the ascending series of animals, the intellect appears ever more developed and complete, knowledge always separates itself more distinctly from will, and thereby becomes purer."3 The possibility of this ascent from "the world as will" to "the world as idea" is man's distinctive mark, and even in the undeveloped human intellect we detect its presence. "The brute only perceives things so far as they are motives for its will, and even the most intelligent of the brutes scarcely overstep these limits, because their intellect is too closely joined to the will from which it has sprung. On the other hand, even the stupidest man comprehends things in some degree objectively; for he recognizes not merely what they are with reference to him, but also something of what they are with reference to themselves and to other things."4 "The rise of intelligence, from the obscurest animal consciousness up to that of man, is a progressive loosing of the intellect from the will." Such a liberation of the intellect from the will, or rather such a captivation of the will by the intellect, is the presupposition of knowledge. The subject must thus lose itself in the object, if it would find the object.

The perpetuation of the bondage of the intellect to the service of the will would mean the arrest of man's intellectual development before it had reached its culmination. The true destiny of the intellect is independent; it has its own career to run, its own mission to fulfill. The very essence of knowledge implies the obedience of the affective and practical self to the intellectual and theoretic. It implies the

[.] The World as Will and Idea. Eng. tr. vol. i, p. 199.

^{*} Ibid., vol. i, p. 230.

⁴ Ibid., vol. iii, p. 30.

¹ Ibid., vol. III, p. 30.

⁵ Ibid., vol. iii, p. 31.

Copernican change of standpoint from the subject to the object, from the self to the world.' To say that the subject must always dictate to the object, desire and will to intelligence, is, we have seen, to deav the possibility of knowledge. To advocate the persistency of the will's dominion is to urge contentment with a lower level of intellectual possibility, and against any such reactionary doctrine we must reaffirm the old Greek view of the essential superiority of the purely theoretic life. If we hold that it is the duty of man to realize all the possibilities of his nature, we cannot hold that he has discharged that duty so long as his intellectual possibilities remain unfulfilled. We rightly condemn the life of the recluse in whom the ordinary sensi bilities are numbed and the practical activities forgotten in an absorbing intellectualism; we rightly demand of the scholar and the man of science the faithful discharge of ordinary social service. Yet we ought not to forget, as in this practical and utilitarian age we are apt to do, that the intellectual life has its own rights and its own responsibilities. and that the fulfillment of these implies undistracted and uncompromising devotion. The first and last condition of such devotion is leisure from practical preoccupation, from the business of the will. Let not the practical man grudge the devotees of the intellectual life their learned lessure: let him remember that their business is different from his, and that it needs other tools for its acomplishment. And let us try to secure some leisure hour in every life, however practical, for the care of the intellect and the pursuit of knowledge.

Not that there is any real dualism of interests between intellect and will, knowledge and life. The highest and best service of the will demands the highest development of the intellect. We must know, if we would do; and the highest knowledge is never reached so long as the mind's eye is fixed on the practical value of knowledge. Socrates found the secret of virtue in self-knowledge; and we, to whom the "environment" has come to count for so much in the development of all life, can hardly fail to see that, if we would adapt ourselves aright to our environment, we would know the world as well as ourselves. And when we think of human "practice" in all its length and breadth, when we give full scope to all the possibilities of the human will, to what form of knowledge shall we deny a practical value and a bearing on the will? Have we not seen that they are all, in the last analysis.

² This is not intended, of course, as a denial of the intellectual importance of a knowledge of the self, including its affective and practical aspects.

forms of will, since all are forms of attention? The intellectual life has its own peculiar temptations, as it has its own peculiar virtues, developed by victory over these temptations. And where else shall the will learn so well its great lesson of obedience and self-surrender as in learning the lesson of a loyal and complete obedience to the truth?

The most valuable ethical results of the intellectual life are possible only if knowledge be sought as an end-in-itself. The education of will and feeling which results from the disinterested pursuit of truth cannot result if truth is pursued as a means to self-gratification. Knowledge is, in its essence, objective and universal; truth is, in its very nature, catholic and not of private interpretation. The ethical fruits of the intellectual life are objectivity and catholicity of spirit, unselfishness of character. In the truly scientific or philosophic mind there is no thought of self, no consideration of personal advantage. The entire attitude is one of harmony with reality itself, of obedience to the facts: the soul is filled with the "intellectual love of God." If we cannot, with Spinoza, say that this is the only "freedom," the only way of escape from the slavery of passion, we must surely admit that it is one form of human freedom, one way of escape from the dominion of selfish feeling. In self-knowledge lies the secret of self-control, as Socrates saw no less clearly than Spinoza. "That emotion which is a passion ceases to be a passion as soon as we form a clear and distinct idea of it," that is, as soon as we see it in its universal relations. Thus to know ourselves is to know our neighbors, and the world, and God as well. The act of knowledge is itself an act of will, and the parent of similar acts, the source of a corresponding character. The intellectual life is a training school of moral virtue. Courage, patience, perseverance, independence, modesty, candor-these are some of the marks of the intellectual character, wherever we find it. Not these, but the corresponding vices, are the results of the pseudo-scientific spirit of intellectual utilitarianism. In the true intellectualism is always found the spirit of self-sacrifice and of the "love of God;" from the false intellectualism self-love is never absent. The kingdom of knowledge is entered, like the kingdom of heaven, non nisi sub persona infantis. If moral freedom consists in the escape from self, the knowledge which delivers us from this bondage is surely one of the paths of moral freedom, one form of the liberty of the children of God. "Ye shall know the truth, and the truth shall make you free."

The social value of such true knowledge is no less real though it

may be less obvious, than its value for the individual. The indirect social utility of knowledge through its application to the business of life, its ministration to human convenience, is obvious enough, and has been sufficiently emphasized. What I have now in view is the direct social value of pure, unapplied knowledge. The education of will and feeling which is inseparable from intellectual development is itself a splendid preparation for social service. As selfishness is the fundamental social vice, unselfishness is the root of all social virtue; and we have seen that the intellectual life is essentially unselfish. Besides, psychology teaches us that the intellectual process is essentially a social process. The part which the imitation of others plays in the development of knowledge, has been emphasized recently by Professors Baldwin and Royce, among others. Even "invention" and discovery, originality, and genius, the departure from the established social forms of knowledge, must submit to social confirmation if its results are to receive their final ratification as true. What, indeed, is the distinction between true knowledge and mere opinion but the distinction between that which holds good for all, and that which holds good merely for the individual, between the public or social and the private or individual interpretation of reality? Every attainment in knowledge is therefore, an exchange of the individualistic for the social point of view. Every intellectual lesson is a lesson in the subjugation of individual prejudice and preference to the obedience to the common truth. The school and the university, no less than the family and the state, are the scene of conflict, of adjustment and readjustment, between the individual and society. And, in the one case as in the other, the conflict may be keenest and most momentous when the alter or the socius is invisible rather than visible, and future rather than present.

The results of our inquiry may be briefly recapitulated:

- t. We have found that it is an error to separate and hypostatize the intellectual life, and to regard it as the whole, or as the highest and only worthy form, of human life. Knowledge is only a part of the complete whole of human possibility.
- 2. In the larger whole of which it forms a part, knowledge has not a merely instrumental value. It is not merely a means to an end beyond itself, it is also an integral part of the end. To assign to it a merely instrumental and subjective value is to negate the essential idea of knowledge, and the logical issue of such a view is skepticism.

3. The recognition of the intrinsic value of knowledge secures to it an ethical significance otherwise impossible, a significance which is social as well as individual in its scope.

A final remark may be added, upon the closely related and wellworn question: Can virtue be taught? For our answer to the question whether, and in what sense, "virtue is teachable," depends on our answer to the question whether, and in what sense, "virtue is knowledge." A merely abstract knowledge, or a purely intellectual apprehension, has no influence on the will, and therefore affords no security for virtuous character or conduct. It is possible, in this sense, "to know the better and choose the worse." The knowledge which has practical significance is concrete, individual, and "touched with emotion" or affective tone. The inevitable expression of such a knowledge is action in conformity with it, and such active or practical expression of knowledge is the true medium of its further influence. Action is eloquent, where speech leaves us unmoved. For action is concrete and individual and contagious, while speech is abstract and general and passionless. In the words of Schopenhauer, "ethical discourses and preaching will just as little produce a virtuous man as all the systems of æsthetics, from Aristotle downwards, have produced a poet. For the real inner nature of virtue the concept is unfruitful, just as it is in art. . . . Velle non discitur." Still we must admit that, important as it is to distinguish between theory and practice, science and art, both teaching and preaching have an ethical value, although their value is inferior to that of the ethical life itself. Words can burn, as well as deeds; and even the calm appeal of reflective thought, and of the speech in which it finds its appropriate expression, is not without its influence upon conduct and life. If morality is the expression of "right reason," then the awakening of reflection about the rational significance of action can hardly fail of its ethical consequences. As all moral awakening is also an intellectual awakening, it would be strange if intellectual awakening were not, sometimes at least, a moral awakening too. Indeed, if we use the term "moral" in the full extent of its connotation, and recognize the moral quality of even the intellectual life, we must admit that all intellectual awakening is at the same time a moral awakening, inasmuch as it is an awakening of the slumbering intellectual self, that all education is moral, and that every teacher is a teacher of virtue.

THE SOCIAL FUNCTION OF UNITED STATES HISTORY

By PROFESSOR JOHN BACH MCMASTER, University of Pennsylvania.

On the principle that a shoemaker should stick to his last, my remarks will be confined to the history of our own country.

This history is commonly divided into a series of periods during each of which, events of a particular kind so predominated as to give a distinct characteristic; as the period of discovery and exploration the period of settlement and occupation; the period of struggle for supremacy between the colonizers ending in the dominance of the English race; the period of struggle of the English colonies for the rights of self government; the war for independence when no other means of securing these rights remained; and the long struggle for a government ending with the establishment of the different state and federal constitutions. This may be regarded as the close of the first series of historical periods. An epoch has occurred, a new nation, a new political organization has been added to the family of nations. The United States of America is permanently established.

Looking back over this series of periods it is quite apparent that in some of them the acts of individual men, and in others of small bodies of men, predominate. This is especially true of the periods of discovery and exploration; occupation and settlement; which have in consequence been described entirely from a biographical point of view. The early history of our country as usually told is little more than narrative of the exploits of Columbus, Ponce de Leon, DeSoto, Champlain, Marquette, Joliet, LaSalle, John Smith, and a host of other men who stand out as discoverers and explorers. As definite information of their doings could not always be had, or when attain able was too dry or too meaningless for the use of early historians, every attractive incident of a personal kind has been seized on and raised to the dignity of national history, and because they are pic turesque, have been given undue importance to the exclusion of what is really essential.

The economic and industrial condition of Europe, which was the

direct cause of the period of discovery; the fact that America was never sought, but stumbled on; that when found it was not wanted; that much of its exploration was due to a persistent effort to a way around it, to discover a northwest or a southwest passage to India, are lost sight of in the account of the doings of particular men. It is true that history of these early times must be largely biographical; that the period was preeminently one of adventure; that beyond the incidents furnished by these adventures the material is scant, yet they ought to be subordinated to what is really of historical importance. The motive for discovery, the effect of discovery on the geographical ideas of the time, the reasons why the four great maritime powers of Europe came into possession of our country, why the Dutch acquired the Hudson, why the Spaniards occupied our Gulf coast, the English the Atlantic coast, and the French the Great Lakes and the Mississippi, and the profound and lasting influence this particular arrangement of European settlers had on our later history, these are the things it concerns us to know, rather than the doings of particular men and the Indian wars of particular colonies.

A knowledge of the industrial and economic condition of Europe and Great Britain again is necessary to a correct understanding of the period of colonization, what drove the settlers to Jamestown and Quebec, what sort of people they were, what customs, usages, institutions, political ideas they brought and planted in the new world, is all important. These are the things which determine the future of the state far more than the character of any man. Yet the early history of the colonies is too often a story of Indian wars, religious disputes, and biographical incident. The knowledge of these times which many a child carries away with him from school consists of the stories of the rescue of Smith by Pocohontas, of Endicott cutting the cross from the flag; of Bradford sending to Canonicus the snake skin stuffed with powder and ball; of Penn buying land from the Indians, of King Philip's War; of Roger Williams driven into exile; of the Salem witch-burnings, and of Bacon's so-called rebellion. The steady movement of the English westward from the Atlantic; the spread of the French into the valley of the Mississippi and their occupation of it to the head waters of the Ohio; the great difference in the manner of occupation by these two peoples, the French building forts and taking military occupation; the English building towns, opening up farms and taking possession by actual settlement, the effect this difference

ties of life were then unknown, and that the lot of every man in every walk of life was far harder than at present.

When this condition has been shown and understood, the boy should follow step by step the wonderful progress from what was to what is. He should see our people hurrying westward in three great streams, pushing the frontier before them across the Mississippi valley. the Mississippi River, over the great plains to the Pacific, building cities, founding states, developing the resources of our country. He should see the northern stream engaged in a thousand forms of diversified industry, and the southern stream ignoring commerce and manufactures and devoting its energy to growing cotton and tobacco, and he should be made to see how from these two opposite economic conditions grew in time two separate and distinct people, with utterly different ideas, institutions, customs, and purposes in life, and when this has been made clear to him he will understand the Civil War. To present such a history in slices four years thick and labeled with the names of presidents, or as a dry record of Congress and the doings of the political leaders of the hour is to destroy its meaning and make it valueless. To tell a child that Fulton invented the steamboat, Howe the sewing machine, Morse the telegraph, Hoe the steam printing press, Bell the telephone, Goodyear vulcanized india rubber, is idle if the story stops there. The thing to be impressed on him is that these great inventions and discoveries and the leading inventions and discoveries of the nineteenth century, have bettered the condition of civilized man everywhere, and are contributions to human welfare made by America. We are a people animated by the highest and noblest ideals of humanity, of the rights of man, and no history of our country is rightly taught which does not set this forth. Above all, it should be so taught as to destroy that baneful belief that we have degenerated from our forefathers. There is no land where the people are so prosperous, so happy, so intelligent, so bent on doing what is just and right as the people of the United States.

METHOD OF THE SOCIAL FUNCTION OF HISTORY.

By PROFESSOR M G. BRUMBAUGH, University of Pennsylvania

It is difficult to understand the use of the term social as applied to pedagogy in some recent attempts to define the social element in teaching processes and agencies. A recent treatise on psychology says, "the 'abstract' child of psychology is an individual child. And it is impossible to pass at one step from the individual child of psychology to the class room child -- the 'average' or social child -- of pedagogy." This impossibility to go "at one step" from psychology to pedagogy may help to explain why a psychologist talks of pedagogy in the way above cited. Who believes in such an "average" child? What pedagogy ever seriously ignores the flesh and blood product that stands and sits and walks and talks and is in school every day? What writer, but one wholly given to an "abstract" laboratory creature, would think of calling this abstraction of the so called pedagogue the social child? Rousseau dreamed a static system of education—a system that gave a life to train a life. But Pestalozzi, by an instinct that was truer than the Frenchman's philosophy, saw the value of social functions in education. The groups of poverty stricken ones at Neuhof on the madder farm concreted the real social phase and gave a practical demonstration of the value of grouping for educational purposes.

The century just closing, through the energetic efforts of Herbart and his followers, has shown the way for social form in the matter of education. The doctrine of apperception with the "circle of thought" demands such a grouping of the data of education that the social side of the subject-matter—the side that fits the child to live as one of many and not as one for itself - has been carefully considered, and some fairly definite practical, as well as theoretical, results are known. Studies that report man's activities in his environment must be presented to the child in a manner best adapted to train him for complex social life. They ought to be recast and so presented as to give the

growing man his true place in the social order.

The curriculum as now organized is almost wholly an "intellectual" curriculum, by which one is to understand a curriculum that merely furnishes the mind with facts, that avowedly furnishes the mind with a rich order of truth drawn from almost every conceivable source. It may be characterized as the product of the divorcement of education from the church and the almost miraculous expansion of scientific material during the last quarter of a century. There has resulted an unfortunate bias in education. The feeling life—the richest possession of the child and that which best makes for will training is almost wholly disregarded.

The cry of the reformer is, "Make the school more ethical," and the practice of the school is a mere purely intellectual curriculum resulting in a decreasing ethical outlook by the pupil.

If education that makes for character is the best education, it follows that a curriculum that best attains this result is the best curriculum. Such a curriculum must arouse with each addition to the circle of thought a corresponding deepening and widening of the interest of the child in the subject-matter. This increased interest is the direct result of enlarged feeling life. Trained interest demands trained feelings. There will result increased activity, an activity that is character in action.

Such ethical training as is here sought is at the present time largely imparted, if at all, through the study of history, which study best lends itself to the ethical treatment. But history must touch a more vital spring of action than general ethical values. It should be so presented as to arouse the social sense of the child. In doing this, that is, in placing the child so fully in possession of social concepts with attendant interests that there results naturally a feeling of "athomeness" with the social complex, history has rendered the pupil facile in serving the social body by intelligent activities in harmony with the highest welfare of the race.

Professor Mace has clearly indicated and justified the need of securing the logical germinal fact in any given event. It is this fact that is enduring and potential.

"The Pilgrims landed in December, 1620; but, as far as we can see, our institutions would not be different if the Pilgrims had landed six months earlier or six months later. The landing was made on Plymouth Rock; but it is difficult to show that this interesting incident has added to the stability of our institutions. They came over in the

Mayflower. What if it had been the Speedwell, a vessel of no mean name, would this have given America a different destiny? This boatload of precious freight numbered one hundred two souls. What if there had been one hundred or one hundred twenty? Would this difference in numbers have changed our political, religious and social life? They signed the 'Compact' in the cabin of the Mayflower; but it could have been signed on land without having had its significance altered. There is one thing in the life of this hardy band, and in the life of the numerous bands that came to New England and elsewhere, that could not have been changed without changing our history. If these early settlers had been animated by a different set of political, religious, and social ideas, the whole character and trend of our institutions would have been altered."

All of which is unquestionably admirably put.

But Professor Mace has, in his evident desire to justify the philosophic value of history, overlooked the fact that the logically germinal fact must be comprehended by the pupil before it can be a to-himeffective source of insight into existing activities and tendencies in the social order and in social progress.

The problem primarily then is not what is that germinal fact, but how can that germinal fact be realized by the child and rendered potential for the interpretation of the present social order and progress?

True, indeed, the name of the hall in which the Declaration of Independence was signed, the date of its consideration, the names of the officers of the Congress enacting the decree, the time of its public promulgation and the name of the reader of it on the historic 8th of July, 1776, are all nonessential, in fact, accidental matters, but are these, for that reason, to be overlooked in the teaching of the germinal facts of the declaration? If so, history becomes merely an outline of philosophic sequences of less or more significance. But such sequences will never arouse the student to the point of desiring to trace this abstract order, much less to find in it the motive and inspiration for an ethically social career.

Before the interpretative tie that binds the past to the present, must come the feeling tie that binds the pupil to the past. The process is not single but dual in its nature. Here is the vast social complex of today into which the uninitiated mind can find no portals of entry.

^{&#}x27;Method in History, p. 3.

Before its multiform manifestations he stands dazed. He either shuns it wholly and thereby loses his possible worth or he inconsiderately rushes in where angels might well fear to tread. What then is his urgent need?

He must go to the sources of the various diverse elements he sees only as a vague complex and study each element in its genesis. Thus he obtains the keys to the various portals, and approaches the social order with a trained and equipped mind—a mind that analytically apprehends the present and resolves it into its simpler elements.

How shall he obtain this key? To merely say, "here it is, here is the simple source of one or more of the elements in this tremendous complexity," is not enough. He must be incited to take this initial simple fact with flaming zeal and press its interpretative power to the solution of his present environment. History is not a study of the past in order to know the past. It is a vivid comprehension of the past as the interpreter of the present. Its ethical import lies in its power to make lucid the social environment of the student to the end that the student may adequately act his part in the social order.

Whatever, then, links the student with the deepest interest — with a many-sided interest — to the past germinal fact is pedagogically significant. This link is the feeling tie, and the logically insignificant fringe of attendant events may and will intensify the student's apprehension of the germinal fact — the fact that makes social and ethical advance.

To turn the child to history, then, is not enough. He must find in the historic treatment that large sum of concrete data around which his feeling life may readily entwine, and by which he is lifted to a comprehension of the vital and enduring fact.

The order of treatment of the subject-matter must be determined by the condition of the student mind. The first approach should be the sympathetic approach. At the outset, to love historic matter is better than to know it. Enjoyment is the initial approach to ethical comprehension. Elementary history should give the child two definite gifts: (1) a sincere love for historic truth; (2) a wide acquaintance with the general field of historic truth. The latter will be best imparted by an investigation of matters most intimately connected with the pupil's life. Such matters are to be determined in no chronologic order. To the child events are dateless. "Once upon a time," "a long time ago," "in the beginning," or "once," is a better

historic peg than "January 22, 1561," or "383 B. C." For obvious reasons this intimacy of interest is most readily aroused in events of a somewhat local character—sufficiently local to touch the vital forces that condition his own life and to afford a presentation so rich in concrete data as to develop a many-sided interest in the event.

Is it not time to declare that an elementary treatise, say of the United States, followed by an enlarged volume covering the same events more in detail, should cease to be used in our schools? Would it not be better for the child to study first a series of incidents derived from a more limited historic area, as say the growth of family order or the pioneer ancestry, and then study the more extended history of the nation? Such an order is in accord with the child's interests. This preliminary study would present a few incidents that are germinal, or, as Professor Dewey says,' "the study of history can present to the child's consciousness type illustrations of the main lines in which social progress has been made most easily and effectively and can set before him what the chief difficulties and obstructions have been."

After reading some such story as the following the student will understand feelingly, and hence ethically, something of the simplicity and the difficulty attending the founding of a new home in a new land. It will reveal in miniature one phase of the whole pioneer period. It will give the child the illuminated fact, and this as a type will enable him to grasp with a richness of sympathetic interest an initial fact that by contrast will heighten his comprehension of the problem of home-building under primitive conditions.

The following letter' was written by Sally Brindley of Bucks county, Pennsylvania, to her grandmother in England:

"The Manor, Bucks Co., Pa.
"The 28th of 11th mo., 1685.

"DEAR GRANDMOTHER:

"Mother has been writing to thee since last fifth day, and she told me I could put a sheet into her letter. We want to get it off on the ship which sails from Philadelphia about the 10th of the twelfth month.

"Our new house is all done; I wish that thee could see our big kitchen. It has a fireplace entirely across one end of the room

The Third Yearbook, p. 22.

^{*} From Stories of Pennsylvania, New York, 1897.

Father brings the backlog in with the horse, and when the boys pile wood up against it, such a fine fire as it does make!

"We have so much wood. Papa says that we would be rich if we had this timber in England. I gather chips. We had a grand time this fall roasting chestnuts in the ashes. I have four quarts dried. The new house is built of logs and nicely plastered inside. We'll be cozy and warm this winter. There is room in the fireplace for Father's big chair and Mother's rocker. There is a bench on the other side of the fire for us children.

"There is a little narrow window near the chimney where the spin ning wheel stands. I've learned to bake cakes on the coals. We have a Dutch oven now. I wish thee could have seen our garden this summer. Besides the rows of sage, and camomile, thyme, comfrey, and rue, with yarrow and some onions, we have great big love apples [tomatoes]. They are almost as large as an apple. They grow bushy plant which starts from a seed in the spring. Uncle James found them last summer among the Indians. He brought some of the seed home.

"Mother says they are poison if we eat them; but I guess nobody would want to eat them. They are just pretty to look at. The mendug a long winding ditch around the meadow bank this fall. It will carry the water along the side of the meadow so they can let it out to run all over the bank. It keeps the grass very green and pretty.

"We have so many horses and cows that are not ours. Papa is Ranger now, and takes up all the strays. Thee don't know about this, does thee? Well, everybody here lets their cows and horses run loose in the woods. Sometimes they don't come back and it takes a long time to find them.

"We heard of a little girl this fall who got lost while hunting for the cows. Dark came on, and she heard the wolves howling. It was very late when she found the cows all huddled together. Her father found her the next morning fast asleep alongside the bell cow. She was safe and sound. I'm glad I wasn't that little girl. All the cows here have ear marks. William Penn's cows have both ears cut off at the top. It must hurt the cows to have their ears cut.

"I also find this in the book; Papa put it in last summer: 'Att the fall of the year 1684 there came a long-bodied young cow. She was very wild, and being a stranger, after publication, none owning her. James Harrison att the request of Luke Brindley, the Rainger,

wintered her, and upon the 23rd of the 7th month 1685 sd cow was slaughtered and divided, two thirds to the Gournr. and one [Governor] third to the Rainger, after James Harrison had 60 lbs. of her beef for wintering of her att j of' [10 shillings stirling].

"So thee sees we have plenty of meat. We have 200 shad that were caught last spring and salted. Some of them are very big. The boys were out hunting yesterday and brought in two wild turkeys. We'll have one for dinner on first day, and we'll keep the other for monthly meeting.

"Mother has school for me every day. She is the teacher and I am the scholars. I am head of my class. Father says that if I keep on doing that well he will send me to England to school when I get big. Then I'll see thee, Grandmother, and the dear old place I love so well. There is no more room on the paper, so I must stop.

"With lots of kisses and two pats for dear old Rover,

"I am thy affectionate granddaughter "Sally Brindley."

Another phase of the same problem, showing not only the isolated struggle against the forces of nature, but the unequal struggle against the heartless savage foe may be presented in some such incident as the following, adapted from Rev. Mulenberg's narrative in Halle Reports, vol. 2, p. 480 et seq.'

" REGINA."

"On a sunny morning in the autumn of 1754, John Hartman rose early and gathered his wife and four children around him in his cabin home. He had come from Germany to the peaceful province of Pennsylvania that he might earn enough to feed and clothe and shelter his loved ones. The cabin door was ajar, the sun lay like a level rule of light upon the rough but clean cabin floor. The faithful dog, Wasser, was asleep in the yard. The harnessed horses were eating their morning meal. A flood of song poured from a hundred birds astir in the overarching trees. The blue smoke curled lazily upward from the rude chimney, and was lost in melting mists of the valley near where Orwigsburg now stands.

"The pious Lutheran father took his great German Bible, which he had carefully brought from the Fatherland, and read the morning lesson. Then they all knelt, and the good man prayed: 'We thank

^{&#}x27; From Stortes of Pennsylvania, New York, 1897.

thee, O Lord, for thy great care and love to us. We are glad for the light of a new day. Help us to live it aright. We love thy book, we worship thy son, our Savior, and we pray thee to keep us this day from harm and danger. But not our will but thine be done.'

"Then the breakfast was eaten thankfully and the plans for the day made.

"Mrs. Hartman and the youngest child, fat chubby Christian, were to go to the mill, miles away, to get flour and to visit sick Mrs. Swartz.

"Mr. Hartman and George were to finish seeding the last field before the rains of autumn began to fall.

"Barbara and Regina were to stay alone in the cabin and 'keep house."

"As Mrs. Hartman and her baby boy passed by the clearing, they called a cheery 'good-by' to papa and George. Little Christian, sitting astride the old horse and held by his mother, waved a fond farewell as they passed into the forest.

"At noon Barbara took the great tin horn and gave a mighty blast to call the workers to dinner. While the family were eating, old Wasser came rushing into the house. Mr. Hartman knew his brave dog would not run from a common foe. He spoke to the dog; but Wasser stood in the door, his bristles up, growling fiercely. Then the dog made a fearful leap and landed upon a big Indian and brought him to the ground.

"Mr. Hartman ran to the door. Two sharp rifle cracks rang upon the air. Two bullets from heartless foes struck the innocent man. He fell dead. George sprang to his father's side, and he, too, was struck dead. Then the Indians tomahawked faithful Wasser. Fifteen yelling, hideous demons rushed into the cabin. Barbara ran into the loft, but poor, sweet Regina threw up her hands to heaven, and cried. 'Herr Jesus! Herr Jesus!' For a moment that name struck them dumb. Then they seized Regina, and drew a scalping knife over her lips to tell her to keep still. They dragged Barbara from her hiding place and made the poor girls serve to them the dinner they had so gladly and carefully set for father and George.

"As the girls gave food to the murderers of their loved ones, they could see their dead father and brother lying across the cabin door

"As soon as the Indians had eaten everything to be had, they began to plunder the cabin. They fied in bundles everything they cared for. and taking Barbara and Regina by the hand, led them out into the field. Here the girls saw a dear, sweet, little girl, only three years old, tied to the fence. When the little captive saw the Hartman girls, she began to cry bitterly, and say in German, 'Oh, Mamma! Mamma! Where is my mother?'

"While the children wept, the Indians set fire to the house and barn, and as they led the sobbing children into the wilderness, the result of John Hartman's hard toil, together with his body and that of his son, disappeared in smoke.

"Late that afternoon Mrs. Hartman returned, leading the horse. On its back was the grist from the mill and tired little Christian. When they came out of the forest Mrs. Hartman looked puzzled. No house was in sight. 'Surely this is our place,' she said to herself. 'Yes, there is the beautiful pine tree that stood close to our cabin. There are the fields, and there is the orchard, and there'—but her words were cut short by little Christian, who cried out, 'Why, mother, where is our house?'

"They hurried on. Then they saw the charred ruins of their happy home, and in the yard was blood. It was the blood of faithful Wasser. Then the awful truth—an Indian massacre—her loved ones dead or captives—came to her. She fell upon her knees and lifted her heavy heart to God in sobs and prayers. That night she went to a neighbor's house and told her story. News had also reached the place that a farmer named Smith had been murdered and his little child, Susan, carried off.

"Poor Mrs. Hartman was almost wild with grief. In the ashes of her home the neighbors found the charred bones of Mr. Hartman and George, and a month later the body of Barbara was found by some hunters. Mrs. Hartman went to see the remains. It was only too true. The heavy tomahawk had done its work, and poor Barbara was dead. Under a large oak, by a stream, with grief beyond control, the widowed and heart-broken woman laid Barbara to rest till the morning of the new day of God.

"But what of Regina? If I could only see Regina I would say, like good old Simeon, "Now, Lord, let thy servant depart in peace." But no news came. Susan Smith and Regina Hartman were gone.

"Years went by. Christian had become a strong lad of fourteen. He was his mother's only comfort He did all that a noble boy could to make his mother's days peaceful and happy. "But how could she be contented while Regina's fate was unknown? When she read her Bible in the morning and knelt in prayer, she always asked God about Regina. In the evening hour, when the twilight settled about her lonely home and saddened her lonely heart, she would gaze far away into the fading western light and think of Regina. Then her lips would move tremulously and tears would flow down her wrinkled cheeks as she sang the favorite song, the song she had so often sung to Regina:—

'Allein, und doch nicht ganz alleine bin ich In meiner Einsamkeit.'

'Alone, and yet not all alone, am I In this lone wilderness.'

"Would the black wilderness ever give her tidings of her dear child? We shall see.

"In the dark woods of western New York, by the side of a mountain stream that leaped from the rocks and played with the sunbeams, stood an Indian wigwam. It was old and cheerless within, but grand and beautiful was the sylvan scene that faded into green and gloom around it.

"Here dwelt an ugly old Indian woman, her son (a great warrior), and two girls who had been captives so long that they scarcely remembered their white parents. The older of these girls was Saw' quehan'-na, 'the White Lily'; the other was Kno-los'-ka, 'the Shortlegged Bear.' The old squaw was called She-lack'-la, 'the Dark and Rainy Cloud.' And she was well named. The black forest, bending beneath the savage sweep of a mighty storm, was not so dreadful as Shelackla when she was crazed with rum. She beat these poor girls unmercifully, and they had lived for many years in great fear and greater suffering. They would often steal away into the forest depths and, clasping each other around the neck, weep bitterly.

"The great French and Indian war was fast drawing to a close, and the English were driving the French from America. Of all this Sawquehanna knew little and cared less. She had forgotten the language of her early home and had learned from the old squaw and her son to speak the Indian language. But when she sat alone for hours in tearful silence, her weary spirit longing for something, she knew not what, there would come to her dim memories of a happy home, a kind, praying mother, the songs of the evening hour, and then the awful sense

of fire, smoke, demons, death, and a long journey toward the setting sun. But of all this she could make nothing; and at last she would brush the tears from her eyes, dismiss the painful picture from her mind, begin again to grind the scanty store of corn, and patiently endure her hard and lonely lot.

"One day, in 1765, the soldiers of Colonel Boquet came to the wigwam of Shelackla and took the girls away. The war was over, and Colonel Boquet demanded 'that all white children who had been taken captives by the Indians must be given up to the English government.'

"On September 13, all these children were gathered at Fort Duquesne, and anxious parents walked along the line, looked into each face, rushed forward with screams of delight, and clasped longlost loved ones to their hearts. Old soldiers turned away and wiped the tears from their cheeks, and Colonel Boquet was so overcome that he wept like a child. But no one came for Sawquehanna. She and Knoloska and nearly fifty more were left weeping and wondering what all this meant.

"Eight days later Colonel Boquet began a weary march with these children to Carlisle, hoping that there they might find father or mother and a home. For two weeks they toiled eastward, over the rugged mountains, through the fern-fringed valleys, by Fort Ligonier, Raystown, and Fort Louden to Carlisle. News of their coming had been sent ahead, and every family that had lost children hurried to Carlisle.

"It was not long before people from the Blue Mountains picked out Knoloska as little Susan, the daughter of murdered Mr. Smith. It almost broke Sawquehanna's heart to give up her Indian sister. Susan clung to her and kissed her and wept. But they were no longer in the ugly old squaw's wigwam, and the officers promised Sawquehanna that she, too, might find friends, and perhaps they could again live together. But her heart was heavy. She made no answer, hung her head and sobbed and moaned.

"Poor old Mrs. Hartman, the mother of Regina, with little hope and increasing sorrow, left her mountain home, went by John Harris' Ferry, and came to Carlisle in time to see the tired children arrive. Mrs. Hartman looked into each face, hoping to find Regina; but no golden hair, no blue eyes, no ruddy cheeks like Regina's were there. As she turned to go away she saw Sawquehanna turn her bright, blue eyes full upon her. But Mrs. Hartman walked on. Colonel Boquet came to the sad woman and said; 'Can't you find your daughter?'

- "'No,' was the answer given in sobs, 'my daughter is not here'
- "'Are you sure? Are there no marks on your child by which you might know her?'
 - "'None, Colonel; she was a perfect and spotless child."
- "'Did you never sing to your little girl? And is there no hymn that she was fond of?'
- "'Oh yes!' was the answer, 'I often sang her to sleep in my arms with an old German hymn we all loved so well.'
- "'Well,' said Colonel Boquet, 'just sing that hymn as you and I walk along the line of girls. It may touch the right spot and give her to you again.'
- "'It's no use, good man; she is not here, and, besides, the soldiers will all laugh at an old German woman like me.'
- "But the Colonel pleaded on, and at last Mrs. Hartman began in a clear, loud, but tremulous voice to sing—
 - 'Alone, and yet not all alone, am I In this lone wilderness.'

"Everybody turned to look and listen. It was a touching scene. The pious old widow's hands were clasped in prayer. Her eyes were closed. Her snow-white hair made her upturned face fairly radiant, as the sun bathed her in light. When she sang the second line, a shrill, sharp cry was heard. It came from the heart of Sawquehanna.

"In an instant she rushed to the singer's side, threw her bare arms around her neck, and sobbed 'Mother;' and then Regina joined her mother in singing again the dear old song of their cabin home.

'Alone, and yet not all alone, am 1
In this lone wilderness.
I feel my Savior always nigh;
He comes the weary hours to bless.
I am with Him, and He with me,
E'en here alone I caunot be.'"

Professor McMaster has strikingly presented by the same principle the marked contrast of a century of development in the cities of America.

"How different the cities of the time of Washington were from those of our own day. What a strange world Washington would find himself in if he could come back and walk along the streets of the great city that bears his name! He never in his life saw a flagstone sidewalk, nor an asphalted street, nor a pane of glass six feet square. He never heard a factory whistle; he never saw a building ten stories high, nor an elevator, nor a gas jet, nor an electric light; he never saw a hot-air furnace, nor entered a room warmed by steam.

"In the windows of shop after shop would be scores of articles familiar enough to us, but so unknown to him that he could not even name them. He never saw a sewing machine, nor a revolver, nor a rubber coat, nor a rubber shoe, nor a steel pen, nor a piece of blotting paper, nor an envelope, nor a postage stamp, nor a typewriter. He never struck a match, nor sent a telegram, nor spoke through a telephone, nor touched an electric bell. He never saw a railroad, though he had seen a rude form of steamboat. He never saw a horse car, nor an omnibus, nor a trolley car, nor a ferryboat. He would probably pay his fare with a 'nickel,' but the "nickel" is a coin he never saw. Fancy him trying to understand the advertisements that would meet his eye as he took his seat! Fancy him staring from the window at a fence bright with theatrical posters or at a man rushing by on a bicycle."

There is no need for additional illustration. The problem is sufficiently simple. Its solution is within one's power. The pupil needs to become socially intelligent, socially sympathetic, socially active. To be any one or any two of these is not enough. He must be wholly a socially equipped force. He needs to find, through observation of the truest sort, and interest of the richest sort, the significant and enduring forces that condition his present activities. Having these he has the gift of history.

^{*} History of the United States, p. 178.

THE SOCIAL FUNCTION OF HISTORY.

By FRANK G BLAIR, Franklin School, Buffalo, N. Y.

PROFESSOR SETH, in answer to the question, Can virtue be taught? replies: "A merely abstract knowledge, or a purely intellectual apprehension, has no influence on the will, and therefore affords no security for character or virtuous conduct. The knowledge which has practical significance is concrete, individual, and 'touched with emotion' or affective tone."—" Relation of Knowledge to Will," Fourth Yearhook.

"The ethical value of history-teaching will be measured by the extent to which it is treated as a matter of analysis of existing social relations—that is to say, as affording insight into what makes up the structure and working of society.

"Existing social structure is exceedingly complex. It is practically impossible for the child to attack it en masse, and get any mental image of it. But type phases of historical development may be selected which will exhibit, as through a telescope, the essential constituents of the existing order."—Dewey's "Ethical Principles," Third Yearbook.

Conduct and character are influenced by ideas that are concrete, individual, and interesting. Conduct in the modern social complex is determined largely by a knowledge of its constituents. A knowledge of these constituents is best obtained by a study of "type phases of historical development." For an example, let us consider the notion of toleration or receptivity, which Professor Jenks calls the greatest social virtue, and for definiteness let us take the one phase commonly called religious toleration. This principle has wrought itself so intimately into the social body that it is necessary to abstract it from its setting in order that we may see its true relation to the social whole. The most effective form of analysis, as Professor Dewey suggests, is to take the "telescope of history" and turn it upon the more primitive forms of society where this principle of toleration is struggling to assert itself, and which for that reason becomes an easy object of study.

What period affords the best opportunity for such a study?

The time of Luther may suggest itself, or the reign of James the First, but the American child can with greatest profit turn his telescope upon the striking figure of Roger Williams and the principles for which he contended.

It is the purpose of this paper to outline the matter and method which have been used in one instance with some degree of success, to bring out this idea of receptivity.

The general aim for the series of lessons is, as we have already stated, to give the youth an idea of what toleration means, to the end that they may respect the opinions of others in their social relations.

AIM TO THE CLASS.

I know we shall be interested in seeing how the conflicting religious ideas of the colonists caused them much trouble, and what one manded to remove the cause of this trouble.

PREPARATORY OUESTIONS.

Do we today differ in our religious ideas? Do these differences cause hard feelings and trouble in society? Does a man's relation to a church affect his relations in society? In business? In politics? Is church membership a necessary qualification for voting? How are churches supported? Are members compelled to attend? Can a church punish its members for violation of its laws?

If we could ask these questions of the children that lived in the colonial times, how would they have been answered? Where may we look to find out some of the answers which they would give?

Let us examine some of the laws and records of these colonies. How are the churches supported? In Virginia we get the answer:

"There shall be pay'd unto the mynister the former allowance of to lbs. of tobaccoe and a bushel of corne. . . . "

"It is further granted and ordered that on the first day of March next ensueing, the twentieth calfe, the twentieth kidd of goates and the twentieth pigge shall be likewise due to the mynister."—Laws of 1670.

Maryland's answer would be:

"For the encouragement of able ministers, etc., instead of tithes, a tax, or assessment of 40 lbs. of tobacco per poll shall be yearly

levied upon every taxable person in every parish in this province"-Laws of Maryland.

New York:

"Enacted, that the Trustees of any town shall have power once a year to make a yearly rate for the erecting of a church . . . for the use of the respective town. The tax and rate to be laid and levied in the same manner as other public taxes are levied."

(Quotations from the laws of Massachusetts and Connecticut should be given also.)

What seems to be the common method of supporting the church at that time? What was the relation of the church to the state? What can you say in favor of such a relation? Against it?

If we were in Virginia in 1623, and on Sunday morning began to debate the question whether we should go to church or take a delightful walk, we would be confronted with the following laws:

"321. That whosoever shall absente himself from devine worship any Sunday without an allowable excuse shall forfeite a pound of tobacco, and he that absentethe himselfe a month shall forfeite 50 lbs. of tobacco."

"Be it also enacted and confirmed for the better observance of the Sabbath that no person or persons shall take a voyage (journey) upon the same, except it be to church, or for other causes of extreme necessitie, upon the penaltie of the forfeiture for such offence of 20 pounds of tobacco."—Act XXXV.

In Massachusetts this law would present itself:

"Whereas complainte hath bene made to this court that dyvers persons within this jurisdiction doe usually absent themselves from church meeteings upon the Lord's day, power is hereby given to any two assistants to heare and sensure either by fyne or imprisonment all misdemeanors of that kinde committed by any inhabitant within this jurisdiction, provided that they exceed not the fyne of 5s. for one offence." — Laws of Massachusetts, 1035.

Connecticut, the land of the "Blue Laws," makes out our Sunday duty in the following enactment:

"Whosoever shall prophane the Lord's day, or any part of it, either by sinful servile work, or by unlawful sport, recreation, or otherwise, whether wilfully, or in a careless neglect, shall be duly punished by fine, imprisonment, or corporally, according to the nature and measure of the sinn, and offence. But if the court upon examination, by clear and satisfying evidence find that the sinn was proudly, presumptuously, and with a high hand committed against the known command and authority of the blessed God, such a person therein despising and reproaching the Lord, shall be put to death, that all others may feare and shun such provoking rebellious courses."—Laws of New Haven Colony.

What do you think of the wisdom of such laws? Do you think they would be violated?

We are so perplexed, these modern days, in deciding what we shall wear, that it is interesting to find how minutely these matters were marked out by law for the colonists.

"Sept. 1634. -The courte, taking into consideration the greate, superfluous, and unnecessary expences occasioned by reason of some newe and immodest fashions, as also the weareing of silver, golde and silke laces, girdles, hattbands, etc., hath therefore ordered that noe person, either man or woman, shall hereafter make or buy any apparell, either woollen, silke, or threed, under the penalty of forfeiture of such cloathes, etc.

"Also, that noe person, either man or woman, shall make or buy any slashed cloathes, other than one slashe in each sleeve and another in the backe; also, all cuttworks, imbroidered or needleworke capps bands, and rayles, are forbidden hereafter to be made and worne, under the aforesaid penalty, also, all golde or silver girdles, hattbands, belts, ruffs, beaver hatts, are prohibited to be bought and worne hereafter, under the aforesaid penalty, etc.

"Moreover, it is agreed, if any man shall judge the weareing of any the forenamed particulars, newe fashions, or long haire, or anything of the like nature, to be uncomely or prejudiciall to the common good, and the party offending reforme not the same upon notice given him, that then the nexte assistant being informed thereof, shall have power to bind the party soe offending to answer it at the nexte courte, if the case soe requires:

"Provided, and it is the meaneing of this Court, that men and women shall have liberty to weare out such apparell as they are nowe provided of (except the immoderate greate sleeves, slashed apparell, immoderate greate rayles, longe wings, etc.) This order to take place a fortnight after the publishing thereof."—Early Laws of Massachusetts.

"Whoever wears cloaths trimmed with gold, silver, or bone lace, above two shillings by the yard, shall be presented by the grand jurors, and the selectmen shall tax the offender at £300 estate—Laws of Connecticut.

"AGAINST LACE."

"Oct. 1636.—That no person, after one month, shall make or sell any bone lace, or other lace, to bee worne upon any garment or linnen, upon paine of 5s. the yard for every yard of such lace so made or sould, or set on; neither shall any taylor set any lace upon any garment, upon payne of 10s. for every offence; provided that binding or small edging laces may be used upon garments or linnen."—Early Laws of Massachusetts.

This interference with individual opinion did not affect the matter of clothing alone, but extended into the details of everyday life as wilbe shown in the following extracts:

"1632, Sept.—'Mynisters shall not give themselves to excess in drinking or ryott, spending their tyme idelie by day or night, playinge at dice, cards, or any other unlawful game, but at all tymes convenient they shall heare or reade somewhat of the hold Scriptures, or shall occupye themselves with some other honest studies, or exercise, always doing the things which shall apperteyne to honestie, and endeavour to profit the church of God, having always in mynd that they ought to excell all others in puritie of life, and should be examples to the people to live well and Christianlie. Hening, I, 183"—Early Laws of Virginia.

"1655.—It is ordered that no tobacco shall be taken in the streets, yards, or about the houses in any plantation or farm in this jurisdiction, or without doors near or about the town, or in the meeting-house, or body of the train soldiers, or any other place where they may do mischief thereby, under the penalty of six pence a pipe or a time, which is to go to him that informs and prosecutes; which, if refused, is to be recovered by distress; in which case, if there be difference, it may be issued without a court by any inagistrate, or where there is no magistrate, by any deputy or constable; but if he be a poor servant and hath not to pay, and his master will not pay for him, he shall then be punished by sitting in the stocks one hour."—Early Laws of Connecticut.

"Oct. 1632.—It is ordered, that noe person shall take any

tobacco publiquely, under paine of punishment; also that everyone shall pay 1d. for every time hee is convicted for takeing tobacco in any place, and that any assistant shall have power to receave evidence and give order for the levyeing of it, and also to give order for the levyeing of the officer's charge. This order to begin the 10th of November next."—Early Laws of Massachusetts.

And that the "new woman" had begun to find obstacles in her pathway will appear from the following court record:

"A FEMALE PRACTIONER RESTRAINED."

"March 1636.—Jane Hawkins, the wife of Richard Hawkins, had liberty till the beginning of the third month, called May, and the magistrates (if shee did not depart before) to dispose of her; and in the meane time shee is not to meddle in surgery, or phisick, drinks, plaisters, or oyles, nor to question matters of religion, except with the elders for satisfaction."—Early Laws of Massachusetts.

But in order that the more serious side of these laws may appear, let us examine the laws respecting the attitude of the people toward God and rulers.

"If any person within this jurisdiction, professing the true God, shall wittingly and willingly presume to blaspheme the holy name of God, Father, Son, or Holy Ghost, with direct, expresse, presumptuous, or high-handed blasphemy, either by willfull or obstinate denying the true God, or His creation, or government of the world, or shall curse God, Father, Son, or Holy Ghost, or reproach the holy religion of God, as if it were but a politick device to keep ignorant men in awe; or shall utter any other kind of blasphemy of like nature, and degree, such person shall be put to death."—Laws of New Haven Colony.

".... It is ordered, That if any Christian (so-called) shall within this jurisdiction, behave himself contemptuously toward the word preached, or any minister thereof, called, and faithfully dispensing the same in any congregation, either by interrupting him in his preaching, or falsely charging him with errour, to the disparagement and hindrance of the work of Christ in his hands, every such person or persons, shall be duly punished, either by the plantation court, or court of magistrates, according to the quality and measure of the offence, that all others may fear to break out into such wickedness."—Laws of New Haven Colony.

"... It is ordered, etc., That if any Christian in this jurisdic-

tion, shall goe about to subvert or destroy the Christian faith religion, by broaching, publishing, or maintaining any danger errour, or heresie, or shall endeavor to draw, or seduce others there unto, every such person so offending, and continuing obstinate there after due means of conviction, shall be fined, banished, or otherwise severely punished, as the court of magistrates duly considering us offence, with the aggravating circumstances, and danger like to ensut shall judge meet."—Laws of New Haten.

"That no man blaspheme God's holy name, upon pain of death or use unlawful oaths, taking the name of God in vain, curse, or has upon pain of severe punishment for the first offence so committee and for the second, to have a bodkin thrust through his tongue; and he continue the blaspheming of God's holy name, for the third that so offending he shall be brought to a martial court, and there recent censure of death for his offence.

"No manner of person whatsoever shall dare to detract, slander calumniate, or utter unseemly and unfitting speeches against he Majesty's Honourable Council for this colony, . . . or against the zealous endeavors and intentions of the whole body of Adventurers for this pious and Christian Plantation, . . . upon pain, for the first time so offending, to be whipt three several times, and upon his kneed to acknowledge his offence and to ask forgiveness upon the Sablath day in the assembly of the congregation; (for the second offence, to be condemned to the galleys for three years, and for the third, to suffer death)."—Early Laws of Virginia.

"RESTRAINING THE TONGUE."

"Sept. 1636.—Robert Shorthose, for swearing by the bloud of God,' was sentenced to have his tongue put into a cleft stick, and to stand so by the space of haulfe an houre.

"Elizabeth, the wife of Thomas Aplegate, was censured to stand with her tongue in a cleft stick, for swearing, raileing, and revileing"—Early Laws of Massachusetts.

"1649, 1699.—If any person whatsoever inhabiting this Province shall blaspheme, that is, curse God, deny our Saviour to be the Son of God, or deny the Holy Trinity, or the Godhead of any of the three persons, or the Unity of the Godhead, or shall utter any reproachful words

[&]quot;_____, "o'dsblood, or s'plood, was an oath often heard in England, among the profane at this period."

or language concerning the Holy Trinity, or any of the three Persons thereof, he or she shall for the first offence be bored through the tongue, and fined £20 sterling, to the king, or if the party hath not an estate sufficient to answer the sum, then to suffer six months' imprisonment. For the second offence, he or she shall be stigmatized in the forehead, with the letter B, and fined £40 sterling, (etc.,) or be imprisoned for one year. And for the third offence, he or she so offending and thereof legally convicted, shall suffer death, with confiscation of all their goods and chattles to the king."— Early Laws of Maryland.

And when we remember why most of the early colonists left England we are surprised to find such an attitude toward other religious faith than their own as is revealed in the following.

"It is ordered that no Quaker, Ranter or other heretic of that nature, be suffered to come into nor abide in this jurisdiction, and if any such rise up among ourselves, that they be speedily suppressed and secured, for the better prevention of such dangerous errors."—Laws and Orders of New Haven.

"1656, Nov. 8.—The sheriff of Flushing, Wm. Hallet, removed from office, fined £50 Flemish, and banished, and to remain in prison till his fine and costs are paid—for allowing Baptist conventicles in his house.

"William Wickendam, for officiating as a gospel minister, at Flushing, without authority, fined £100 Flemish and banished, and imprisoned until his fine and costs are paid.

"1657, August. -Two English Quakers arrested and imprisoned at New Amsterdam, for public preaching. When discharged, they with other Quakers who had come in the same ship, left for Rhode Island, where (wrote Dominie Megapolensis) 'all kinds of scum dwell, for it is nothing else than a sink for New England.' Brodhead, I, 636."

"1657.—Robert Hodgson, a Quaker, arrested at Heemstede, (L. I.,) and committed to the dungeon of Fort Amsterdam. Sentenced by the Council to pay a fine of 600 guilders, or to labor two years at a wheelbarrow, in company with a negro. On his refusal to work, when chained to the barrow, he was beaten by a negro with a tarred rope, till he fell down. Finally, after frequent whippings, he was banished from the province." Early Laws of New York.

"1707.—'Whereas, I am informed that one Mackennan (Rev. Francis Makemie) and one Hampton (Rev. John Hampton), two Presbyte-

rian preachers, who lately came to this city, have taken upon them to preach in a private house, without having obtained any license for so doing, which is directly contrary to the known laws of England; when being likewise informed, that they had gone to Long Island, with intent there to spread their Pernicious Doctrine and Principles, to the great disturbance of the church by law established, and of the government of this province: you are therefore hereby required and commanded to take into your custody the bodies of the said Mackennan and Hampton, and them to bring with all convenient speed before the at Fort Anne in New York. And for so doing, this shall be your sufficient warrant. Given under my hand at Fort Anne, this the twenty first day of January, 1706-07.' Cornbury."

"AGAINST JESUITS AND ROMAN PRIESTS."

"1699.—All Jesuists, Seminary Priests, Missionaries, or ecclesiastical persons, made or ordained by any power or jurisdiction derived or pretended from the Pope or See of Rome, now residing or being within this Province, must depart therefrom on or before the first day of November, 1700. If any such continue, remain, or come into the Province after the said first of November, he shall be deemed an incendiary, a disturber of the public peace, and enemy of the true Christian religion, and shall suffer perpetual imprisonment."—Laws of New York.

"AGAINST PAPISTS."

"1643. —(The Assembly directs the above statute to be duly-executed, and enacts:)

"That it shall not be lawful, under the penalty aforesaid, for any *Popish priest* that shall hereafter arrive, to remain after five days after warning given by the Governor, or Commander of the place where he or they shall be, if wind and weather hinder not his departure. Hening, I, 268."

"AGAINST QUAKERS."

"... It is enacted, that no master or commander of any ship or other vessell do bring into this Collonie any person or persons called Quakers, under penalty of £100 sterling ... all such Quakers as have been questioned or shall hereafter arrive shall be apprehended wheresoever they shall be found, and they shall be imprisoned without baile or main prize till they do abjure this country or putt in security

with all speed to depart the Colonie and not to return again. (If they 'dare presume to return,' they are to be proceeded against and punished 'as contemners of the laws,' and caused to depart the country.) And if they should the third time be so audacious and imprudent to return hither, to be proceeded against as felons, (i. e., to be punished with death). Hening, I, 532."

With such laws as these do you wonder that the colonists were always in trouble? Where did they get their ideas of such laws? (In answer to this question a lesson should be given on the intolerant laws of King James the First, a short compilation of which may be found in Trumbull's Blue Laws, True and False. Some reference should be made to the government of Laud in England and the treatment of Bunyan and Baxter.) What caused many of the early colonists to come to America? (Read the Landing of the Pilgrims.)

Do you suppose Bunyan and Baxter were the only ones to suffer under Laud? Would there be any chance for a man of independent thought? (Here a brief statement of some of the significant facts in the early life of the "quick-witted, pugnacious Welshman, Roger Williams," his education, the character of his mind, his fondness for debate, and how it brought him into conflict with the dogmatic Laud, which resulted in his leaving England for Plymouth.)

Now, how do you think he felt when he learned the character of the Massachusetts laws? What would he do? What effect would his actions have? (Some of the details should be given concerning the controversy.) Did they have a law for such cases? (Banishment.) Can you picture some of the scenes in the trial of Roger Williams? What charges would be brought against him? How would he meet these charges?

Here is the record of the verdict of the court as found in the Massachusetts records:

"1635, 3 September.—Whereas, Mr. Roger Williams, one of the elders of the church at Salem, hath broached and dyvulged dyvers new and dangerous opinions, against the authoritie of magistrates, as also writt lettrs of difamacon, both of the magistrates and churches here, and that before any conviccon, and yet mainetaineth the same without retraccon, it is therefore ordered that the said Mr. Williams shall depte (depart) out of this jurisdiccon within sixe weekes nowe nexte ensueing, which if hee neglect to pforme, it shalbe lawfull for the Gouvernor and two of the magistrates to send him to some place

out of this jurisdiction, not to returne any more without license from the court?"

This story of conflict is briefly told by Fiske in the following words

ROGER WILLIAMS.

". . . Among all the puntans who came to New England there is no more interesting figure than the learned, quick-writted, one nacious Welshman, Roger Williams. He was overfond of logical subtleties, and delighted in controversy. There was scarcely and subject about which he did not wrangle, from the sinfulness of perse cution to the propriety of women wearing veils in church. Yet with all this love of controversy there has perhaps, never lived a more gentle and kindly soul. Within five years from the settlement of Massachusetts this young preacher had announced the true principles of religious liberty with a clearness of insight quite remarkable in that age. Roger Williams had been aided in securing an education by the great lawyer, Sir Edward Coke, and had lately taken his degree at Pembroke College, Cambridge, but the boldness with which he declared his opinions had aroused the hostility of Laud, and in 1631 he had come over to Plymouth, whence he removed two years later to Salem, and became pastor of the church there. The views of Williams, if logically carried out, involved the entire separation of church from state, the equal protection of all forms of religious faith, the repeal of all laws compelling attendance on public worship, the abolition of tithes and of all forced contributions to the support of religion. Such views are today quite generally adopted by the more civilized portions of the Protestant world; but it is needless to say that they were not the views of the seventeenth century, in Massachusetts or elsewhere. For declaring such opinions as these on the continent of Europe, anywhere except in Holland, a man like Williams would in that age have run great risk of being burned at the stake. In England, under the energetic misgovernment of Laud, he would very likely have had to stand in the pillory with his ears cropped, or perhaps, like Bunyan and Baxter, would have been sent to jail. In Massachusetts such views were naturally enough regarded as anarchical, but in Williams' case they were further complicated by grave political imprudence. He wrote a pamphlet in which he denied the right of the colonists to the lands which they held in New England under the king's grant. He held that the soil belonged to the Indians, that the settlers could

only obtain a valid title to it by purchase from them, and that the acceptance of a patent from a mere intruder, like the king, was a sin requiring public repentance. This doctrine was sure to be regarded in England as an attack on the king's supremacy over Massachusetts, and at the same time an incident occurred in Salem which made it all the more unfortunate. The royal colors under which the little companies of militia marched were emblazoned with the red cross of St. George. The uncompromising Endicott loathed this emblem as tainted with popery, and one day he publicly defaced the flag of the Salem company by cutting out the cross. The enemies of Massachusetts misinterpreted this act as a defiance aimed at the royal authority, and they attributed it to the teachings of Williams. In view of the king's unfriendliness these were dangerous proceedings. Endicott was summoned before the general court at Boston, where he was reprimanded, and declared incapable of holding office for a year. A few months afterward, in January 1636, Williams was ordered by the general court to come to Boston and embark in a ship that was about to sail for England. But he escaped into the forest and made his way through the snow to the wigwam of Massasoit. He was a rare linguist, and had learned to talk fluently in the language of the Indians, and now he passed the winter in trying to instill into their ferocious hearts something of the gentleness of Christianity. In the spring he was privately notified by Winthrop that if he were to steer his course to Narragansett bay he would be secure from molestation; and such was the beginning of the settlement of Providence."-The Beginnings of New England, John Fiske, pp. 114-116.

SUMMARY.

What questions did Roger Williams have to face? Give some of his beliefs. State some of the laws which he contended against. What were some of the evil results of such laws? (Constant quarrels and conflict resulting in the banishment of many good people—they drove people apart rather than bound them together.) What was one of the chief reasons why the colonies could not unite in some compact form of government? Was this question discussed in the constitutional convention? How was it decided? (See Constitution of the United States.) Can you see any good results that came from these religious conflicts while our country was new? (Cause of the founding of new colonies.) Would that hold good today? (No, we must

live together.) Then, what must be our attitude toward the opinions of others? What rule would work well here? (The Golden Rule) Have we had any violation of this principle recently? (Our treatment of the Salvation Army) Are the different churches of today charitable toward each other? Do we in our associations have sufficient respect for the opinions of our fellows?

GENERAL STATEMENTS.

It will be seen that our general movement was from the child's more or less vague idea of toleration, as he saw it in society as a whole, to the more particular form as presented in Roger Williams and his times, and back with this enlarged notion to its application in the present social life.

In order that this idea should be "concrete, individual, and touched with emotion or affective tone," extracts from the laws and court records, which seem to breathe the spirit of the time, are presented to show the intolerant condition of the colonial mind and the conflict, which Williams and others waged against these hard conditions, it is believed, will give the desired "emotion or affective tone" to the idea.

As the power of the pupil to conceive the significance of an answer depends upon his comprehension of the question, the attempt has been made to have him understand the problem first and then the solution

The power of the child to reason out a situation from his own experiences and from probabilities, as well as to draw inferences from given data is exercised. And after these processes have been performed, the proper function of the "narrative history"—a forceful restatement of the ground covered—is shown in the quotation from Fiske's The Beginnings of New England.

If the idea of toleration thus brought out is to affect the conduct and the character of the child permanently, the teacher and parent should see to it that the habit is formed in his daily life of giving due respect to the feelings and opinions of those with whom he is associated.

BIBLIOGRAPHY: The laws and records of the colonies may be found in any good library. A good compilation and comparison of these laws and records may be found in Trumbull's Bine Laws, True and False, American Publishing Company, Hartford, Conn., Doyle's Puritan Colonies: Fiske's Beginnings of New England: Knowles' Memoir of Roger Williams; Strauss' Roger Williams, the Pioneer of heliquous Liberty; Dexter's As to Roger Williams

THE SOCIAL FUNCTION OF GEOGRAPHY.

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THOSE of us who have read that delightful and stimulating book of Balfour Stewart's on The Conservation of Energy, are doubtless aware of a certain liberalizing influence in its pages - a wholesome sense of freedom from the many vexing states of mind into which we previously had fallen when considering the things of this world. There comes to the thoughtful reader a realizing sense that no fact is self-existent, but that it depends, from the very nature of things, upon the environment of other facts to which it stands in more or less direct relation as an agent of cause or effect. In this light the universe is a universe of energy, and every fact and action, no matter how trivial it may seem to us, is merely a change of position in relation to one or the other of two primary conditions of this energy. In another no less remarkable work by Walter Bagehot, Physics and Politics, the writer sets before us the two universal conditions of energy as operating in human society. The facts of human existence take on a new significance in the light thus shed upon them. There is a feeling that no matter what may happen, what seemingly new conditions may arise, it is only a return to one or the other of two states entirely within the domain of law. This is a very comforting thought, for it settles the mind to a firmer belief in the eternal fitness of things. Facts that before had seemingly no possible relation with one another are now perceived to be merely different expressions of the one universal law of energy. Capital is related to labor in just the same way that an upland lake is related to the mills along its outlet, or that vegetation is related to animal life, or the wound-up clock to its subsequent movement, or the powder in a rifle to the speed and striking force of the ball. The first series of contrasts represents a potentiality of energy - a power present which when liberated through natural means or by proper devices, gives rise to an energy of motion with the result that work of some kind is accomplished

It seems only fitting that educators should recognize the full value

of this law as a factor of the highest importance in teaching. Each study as an embodiment of accumulated knowledge, is so much potential energy to be converted into a working power through intelligent direction. The phenomenon of human intelligence thus appears as a kinetic or motive energy in a world of potentialities.

As in the physical nature of organized beings traits and variations of character are accumulated and transmitted from generation to gen eration through inheritance, so in the progress of human affairs the varied phases of experience and knowledge, accumulated by successive generations, are transmitted through education. As the breeder and the gardener perpetuate by selection every advantageous quality and condition arising in their stock, and eliminate all that would tend toward deterioration, so the educator must exercise the same careful discrimination in his chosen field by disregarding all that is useless and perpetuating those ideas that tend toward the production of a greater efficiency in the social organization. A study, even in the primary aspects, is no longer a magazine of crude and isolated facts to be fired point-blank into a plastic brain, but is to be regarded as furnishing the necessary stimulus for the proper development of the social life of which every individual is an integral part. No fact is more significant of social progress than this attitude of thought toward educational conditions.

The weary memorizing of the names of places and their position on the map was the cheerless outlook of those of us who studied geography a generation ago. Not many years ago it became evident that the newly awakened interest in child-study had leavened the lump of geography, and that thenceforth we should have new geographies and new methods of geography teaching. These anticipated results have been undoubtedly fulfilled in part, but to the thoughtful man and woman there is the feeling that something is lacking-something without which the study is, as it always has been, vague, chaotic, and unassociated. The old definitions—the primary geographic concepts—are thrust aside in these new books for the more attractive matter of springs and brooks, clouds and rain, the seashore, the schoolhouse, the home and the topography of the countryside. The lives of people and children in strange lands are not the least enhancing features of these books and the economic relations of countries receive a full share of attention. And yet one feels that the true inwardness of the study has not been realized, that we are just as far wide the mark in

the aim of teaching as in the old days. If this be so, what is the true aim of geography as a school study? This is a burning question in the minds of the foremost educators of today, and it is toward its possible solution that the subject-matter of this paper is directed.

Man is preëminently a social being, and the study of geography, as one of the group of studies touching the great problems of humanity, must have this end in view. As history presents humanity in every stage and phase of its development, so geography must present the conditions imposed by the earth upon human life and progress. Not until this view becomes the recognized goal in teaching can geography be considered as one of the great moral and social forces in education.

How can this best be accomplished in teaching? First by educating teachers to the full appreciation of this view of the subject. A teacher should make himself acquainted with the fundamental principles and problems of human society as embodied in the various works on social science. He should become alive to the fact that education is but the means for heightening and advancing the social spirit in men and women. No matter what course of study is pursued the tendency of each should be toward the development of this natural and distinctively human attribute. In the second place this social side of geography should be among the strongest features of the textbooks. Not to the exclusion of matter essentially geographical, for without this the study would be like a building without foundations. The true value must lie in the appreciation of the geographic idea as a factor in social development. The child must be brought to realize through both book and teacher that he is part of the great complex organization called society, that has been slowly expanding through every age of human history under the influence of its peculiar environment. He must be brought to realize also that whatever course of future activity lies open to him, whatever position he may fill in society, his obligation to society is the first and greatest function of his life. The thing that he does or leaves undone must of necessity, affect for good or ill the greater social life of which he is an individual

Just how can the study of geography be utilized in effecting this end? It is evident to every sane thinker that this idea of the social value of a study cannot be forced upon the child. It must come through the natural development of his own mind, unfolding gradu-

ally as it unfolds to the great truths of nature and humanity. for babes and strong meat for men is as applicable here, as elsewhere when considering the conditions of growth. The hand-fed babies of the coming generation are offered a great variety of artificial foods and some of these foods are better than others. In the mental hie of the child the artificial pabulum offered in the form of books is quite as diverse as to digestibility and strength-giving qualities as are the physical foods. The impressions received by book and teaching in these early days of mind awakening, will become incorporated in the tissues of thought and affect the character of the man to be, just as surely as the food elements become an integral part of blood, bone. and muscle, in the physical man. And if anything, the menta impression is the more lasting of the two, its ill effects, when produced. more difficult to eradicate, and the later attempts to make up for its deficiency at the proper period of mind growth quite as hopeless in results. The child does not need to be told that he is going to study geography so that he will be a better man when he grows up. will find that out when he gets to be a man, especially if some enterprising magazine editor asks him to write a paper on "Formative No, let him begin his geography as children have Influences." before him - earth, and sea, and sky, forests and deserts, snow-capped mountains, men and beasts of strange lands - these have enough of interest and fascination in themselves if the spirit of inspiration breathes in the pages of the book and in the words of the teacher.

These are the fundamental facts of geography on which the whole superstructure is to be raised. They must be laid in the mind as surely as the foundations of a building are laid in the earth. But is the laying of them is an art, an art that will make each dingy fact as precious as the twelve foundation stones of the heavenly city. This is the teacher's craft wherein he succeeds or fails. If the fact can be illumined with some human interest, it is sure to become a precious foundation stone. The earth is round this is a bare fact, an undressed rock for the foundation. But when we tell a child that we know that the earth is round because men have sailed around it in ships, and have come back to the very spot from where they started without ever turning back in their course, we at once arouse a human interest in the fact. A picture is called up in the child's mind of a ship - a thing built by men, worked and steered by men - sailing for weeks and weeks over lonely oceans, past the shores of unknown

lands, and finally reaching home after sailing around the world. Let someone write the voyage of Magellan with this end in view and see how quickly the child will become interested. He may not appreciate the full significance of the fact that the earth is round like a ball, but the idea will be none the less firmly fixed in his mind. He will undoubtedly ask why the ship and the whole ocean itself does not fall off, how the people and the animals on the other side of the great ball can go about upside down and a dozen other questions. His interest is awakened and the right teacher and the right book will make the best use of the interest. We say that the earth is whirling around in space - what does that convey to the child? It will arouse a wonder in his mind as to what we mean. If we tell him to think of a great ball that a giant threw long ago with such strength that it kept on whirling around and never stopped, we appeal at once to his imagination. We teach that primitive, myth-making center that peoples his mind, as it did the minds of his ancestors, with fairy folk, giants and their ilk. Now if we tell him that the earth is whirling around the sun and that for ought we know the sun may be the very grant himself that sent the ball whirling around in the beginning, we appeal to a fancy that has its roots in the truth of the matter. We can stop here, for, with all our knowledge of planetary laws and solar forces, we are little better off than the child in our conception of the thing.

The distribution of animals and plants in relation to climate and topography is a subject of immense interest and one that has always been a prominant feature of geography study. Fauna and flora naturally form an essential part in the description of any country, but the underlying principle of the "temperature control" in distribution should enter more fully into the work of the higher grades. The reason that wheat extends much farther north than the limit of the corn belt, and pine and spruce, than hard-wood trees, or that the potato has become the staple article of food for millions of people because the conditions of its native habitat on the Andes slopes are not so very different from those prevailing in the higher latitudes - is of far greater value as an aspect of the study than the fact that tigers are found in India, and birds of paradise in New Guinea. The agricultural interests of a country, and, therefore, its economic and social conditions, are directly related to this question of temperature - and the teacher would do well to make him or herself acquainted with the outlines of this subject by the best means at hand.

The reproductive function of the living organism is directly related to temperature. Every species of plant and animal requires a certain sum total of heat in order to complete its full cycle of development and reproduction. It has been ascertained, from extended observation, that the temperature required to start the dormant activities of an organism is 42.8° F. The northward movement of the isotherm of this temperature marks the advent of spring in the the northern hemisphere, calling into activity the germinating force in seeds; the growth and flowering of plants; awakening the torpid insect life and the hibernating animal, and causing the migratory movements of various birds and fishes.

The different species of animals and plants inhabiting a given region are directly related to the amount of temperature throughout the period of reproductive activity. This amount of temperature is expressed by taking the sum of the mean, normal daily temperatures above the initial point of 42.8° F. until it falls again to that point at the end of the summer. Thus the boreal zone of North America. extending from the northern limit of trees south to the isotherm of 64.4° F., is marked by a sum total of the daily temperatures less than 10,000° F.; while the sum of the mean, daily temperatures in the austral or southern zone throughout the summer months aggregates above 11,500° F. The species of animals and plants in each zone are definitely related to these amounts of heat which represent the effective temperature required by each species in order to complete its cycle of development and reproduction. This relation of an organism to temperature is expressed as the "physiological constant" of the species of animal or plant under consideration. The daily temperatures in a lowland region throughout the summer may not rise to any considerable height and yet the average sum will be the same as in a highland district, where the daily temperatures are higher but cover a much shorter period. The species of animal or plant whose "physiological constant" corresponds to this sum will range throughout both districts, but its period of reproductive activity will be comparatively short in the highland region with its shorter summer.1

Climate thus forms a barrier to different species of animals and plants, since some forms are especially adapted to conditions of trop-

¹ See "Laws of Temperature Control of the Geographic Distribution of Terrestrial Animals and Plants," by Dr. C. Habt Merriam. National Geographic Magazine, vol. vi., pp. 229-238, 1894.

ical heat, others to temperate, and others again to cold or frigid conditions. The broad features of vegetation as dependent upon temperature, which characterize the several isothermal zones from the equator to the pole, more or less directly influence the distribution of animals, since vegetable matter of various kinds is directly or indirectly the food of all animals.

The same conditions of temperature and changes in vegetation that are met with in passing from the equator to the pole, are seen in ascending a high mountain, especially on one that rises from a low, tropical plain to beyond the snow line. A mountain range thus becomes a climatic barrier. In like manner the relative amount of moisture determining the presence of deserts, open pasture lands and steppes or vast areas of forest is an essential element in causing barriers to the range of various animals and plants. The ocean, everywhere, forms a barrier that checks the wanderings of most land animals, and in the same way many species are stopped by broad rivers and arms of the sea.

The main thing in the early lessons is to awaken an interest, to create mind pictures, to appeal to the imagination. The facts will be assimilated. It takes time for the seed to germinate after it is sown. If the study is begun in the right spirit it will open the way to the appreciation of those larger truths which are to follow—the superstructure that is to be raised on the foundation.

A child becomes acquainted through geography with the physical conditions of his immediate environment. He enlarges his horizon by imaginary travels over land and sea, thus acquainting himself with new, and entirely different environments. Let us suppose that his home is near one of the rivers of the eastern United States - the Connecticut, Hudson, or Delaware, for example. He reads in his geography of the Ganges or the Kongo and the contrast in the physical environment is brought very forcibly to his mind. He has learned that his river flows from the mountains; maybe a long distance away; possibly near his home. Perhaps he has seen the mountains and they have seemed very high to him. In his geography he reads about the great mountains from which the Ganges flows, mountains so high that their tops are covered with vast fields of snow all through the year, and some of the peaks so high that no man has ever been able to reach their summits. The mountains from which his river comes are not like these; this he knows from what he has read, or, possibly, seen for

himself. The Ganges flows through a hot country, there is never any winter there and the plants and forests are always green. Here is another point of contrast. The plants, trees, and animals he reads about and sees in the pictures are quite different from those of his own home. But there is a river, and mountains, and a country through which the river flows, and plants and animals, and though they are all very different from the ones he knows about home, let after all it is river, mountains, country, plants, and animals. He recognizes the familiar concept in a new guise.

There are, however, other factors of the child's immediate environ ment with which he is probably even more familiar than with those that make up his geographical habitat. He knows the railroad with its long trains of freight cars which load and unload at the station, the fast express that stops scarcely a moment to let off or take on passengers. If he lives near a large river, the steamers and sailing vessels are familiar objects and these, he knows, carry goods and passengers like the trains. Maybe there is a canal near his home on which the long, clumsy-looking boats are towed by horses or mules In the village or town in which he lives there are buildings of many kinds great factories and mills where things are made and grain is ground into flour. Stores where things are sold, homes, and schools, and churches. Then there are the farms about the neighborhood with their broad fields of wheat and corn, and their cattle and horses. No matter where he turns he sees work of some kind going on. Some of the people are buving goods, others selling them; some work in the mills, others on the farms, some run the boats and trains, others are building houses, or quarrying rocks, or cutting down the trees and sawing them up into lumber. Everywhere it is work, and the child soon learns that men must work in order to live.

These facts form the social environment. It is the interaction of the two environments—the geographical and the social—that constitutes the true value of geography as a school study. Not only are the physical features of a river basin like the Ganges or the Kongo brought to the child's notice in reading, but the social features as well. The life of the people forms probably the most interesting and attractive topic of these lessons. Here the child meets with social conditions entirely different from those with which he is familiar. The contrast between these peoples' lives and his own is even greater than the contrast between the purely geographical conditions. He recognizes,

however, that the conditions of life, though foreign in every way to his home experiences, have, nevertheless, a thing in common with them—they equally imply work.

The needs of man, the occupations of man, the intelligence of man these should form prominent lessons in the early part of the primary geography. They open the mind to a broader view of the subject, presenting, as they do, the common ground work of all social conditions under the most diverse geographic environments. The steam sealer battles with the Arctic ice for just the same ultimate reason that the Eskimo hunter ventures out in his frail kayak. alike is after the most vital needs of man food and clothing. With the Eskimo it is a simple question of making direct use of the animal's skin and carcass to these ends for his own immediate wants. With the sealer's catch it is a question of the disposal of the skins to a dealer who again makes disposal to the manufacturer, in the end that they may be worked up into garments for the consumer. With each transfer there is a money payment for the value of the skins received and the work done in making them up into clothing. The daily life of the Eskimo presents a vivid picture of the simple ways and means of a rude intelligence in handling these prime needs of humanity. Much ingenuity is involved in the capture of a seal or walrus, and an intimate acquaintance with the animal's habits on the part of the hunter is the touchstone of his craft. He shows a crude idea of the application of physical laws to human needs when he cuts away the ice to expose a block through which he makes a hole, and running the long thong of hide, that is fastened to the harpoon in the animal's body, through this hole carries the line back to the animal, and making two parallel shits in the tough skin, runs the line through this and begins slowly hauling the heavy carcass out of the water onto the firm ice. He employs the double system of block and tackle to exactly the same purpose as the sealer, who with swinging crane, grappling books, and donkey engine hoists the catch to her deck. The Eskimo gets oil from the blubber and with a wick of moss and a rude dish of soapstone, has a light to heat his food with. The skin, hard and tough from the drying which is neccessary to cure it, is chewed over and over by the Eskimo women, until it is soft enough to be cut up into pieces for clothes, and the pieces sewed together with a bone needle and a thread made of strips of hide by a rough but effective whip-stitch. The sealer "tries out" the oil in big kettles and stows it in barrels in her hold to be passed later into the hands of the refiner. The skins of the catch must go through manifold processes before they can grace my lady's back. The crew of the sealer receive their pay for the work of catching, and with it purchase the necessary food and clothing for themselves and their families. Their relation to the animal as a source of food and clothing is thus indirect. The difference between the two—the sealer and the Eskimo—in the ultimate disposal of the catch is the difference between the lowest social state, that of savagery, and the highest social state, or civilization. The Eskimo is producer, manufacturer, consumer in one person without idea of the representative value of the article. The sealer is only one phase of a law—the division of labor—which everywhere marks the higher social state. This law is embodied in the commercial activity of man, the spirit of trade and the material progress of human affairs.

It is this idea that should pervade the teaching of geography in the higher grades. The primary teaching should lay the foundation of topographical forms, the facts of the physical or purely geographical environment, introducing at the same time the social environment and its various phases under different geographical conditions. In the higher grades the keynote of the work lies in the relation of the two environments. It is not necessary to enlarge upon the details as already set forth in the primary grade. It is a pure waste of time and energy. The overcoming of natural obstacles by man, the planting of the wilderness, the subjugation of natural conditions to his daily needs, the advantage taken by man of every possible means to effect his social development - these are the themes that must be dwelt upon. Nor is it necessary to compass every part of the known earth in order to accomplish the purpose of the study. The study of "types" in each great social and geographical unit, thoroughly pursued and rightly appreciated is worth infinitely more than the effort to gain wide-spread acquaintance with facts that must necessarily fade in large part from

In the geography of the United States, for example, instead of discussing each state as a separate unit, let us take certain natural features of the country at large as "types" for the study of physical and social interaction. A river valley like that of the Hudson affords such a natural unit and may be taken as illustrating the type idea. A sketch of its natural features as topography, climate, vegetation, soil, and pro-

ductions form properly an introductory lesson. The geological history of the valley as helping to solve some of the existing physiographical features may, very profitably, be studied in this connection without, however, going into needless technical details. The fact that the lower Hudson, from just below Albany all the way to the ocean, presents the phenomenon of a "drowned" river valley - one upon which the sea has encroached, forming, in reality, a great tideway or estuary extending inland for more than a hundred and forty miles -has an important bearing on the social relations of the country. The Hudson estuary is navigable for large crafts as far as the city of Troy. Near this point the first large affluent of the Hudson - the Mohawk flows in from the west. The human history of the valley will next claim attention. The native Indian inhabitants; the voyage of the "Half Moon;" the settlement of New Amsterdam; the establishment of frontier posts along the valley and the Indian wars; the early use of the valley as a highway of travel; its colonial history and the part it played in the War of Independence all these are topics rich in suggestion for the teacher, showing as they do, the influence of a local geographical environment on man and the resulting social conditions. The growth and development of the city of New York as the great commercial center and metropolis of the country, is a fascinating study in itself, but before it can be rightly comprehended, outlying geographic areas and certain facts of history must be taken into account. In the years that followed the revolution a gradual, but steady stream of population began moving toward the vast, unsettled wilderness that lay beyond the mountain barrier of the Appalachians. Before the middle years of the nineteenth century this westward movement reached such vast proportions, that the rude frontier towns of the Mississippi basin had grown, almost as by a miracle, into great centers of civilization. Was this civilization to work out its own destiny entirely apart, or were there factors in the physiographic enviconment that were destined to bind in close relation the peoples of the basin with the dwellers on the Atlantic seaboard, and thus knit the entire nation into firmer and closer union? The vast fields of wheat and corn that sprang up over the wide prairies of the Mississippi basin and throughout the lake region, began rapidly to yield a surplus far greater than the amount required for home consumption. The only outlet for this surplus grain was down the river, a very roundabout way to the cities of the East, and New Orleans had little, if any, manufactured articles to send up the river in return. A want creates a demand and with it an intelligence that is directed toward developing the means to accomplish the end in view. The eastern cities wanted the western grain the western cities wanted the eastern manufactures - how were they to gain the desired exchange in the face of natural barriers? It was solved by the building of the Ene canal, which connected the Hudson with the Great Lakes, and the topographical feature which determined the possibility of this was the Mohawk valley. The western grain thus found an outlet by the shortest route and the cheapest means of transportation, to the most favorably situated disbursing center of the East. New York city owes its supremacy as the metropolis of the United States directly to this cause. It had command of the manufactures needed by the West and sent them there in return for grain. It is difficult to estimate the importance of a fact like this in the destray of the country. If a mountain barrier like the Alleghany in Pennsylvania, had reached as an unbroken range to the Laurentian hills, national conditions might have been radically different from what they are today. It was the opening of this great artery of trade that first brought the people of two distinct geographic areas into an indissoluble union, and the immediate effect was seen not only in the rapid growth of the eastern metropolis, but in an enormous increase in the westward movement and the peopling of the Mississippi basin. River valleys, as lines of least resistance, naturally offered themselves as the best routes for the vast railroad development that came with the perfecting of the locomotive as a means of transportation. Trade had always been along the water ways and the railroad, in the main, followed its wake. There is scarcely a more interesting and profitable topic in school geography than the intelligent study of a railroad system.

The Hudson valley is only one of a number of "types" that may be studied in place of the old method of each individual state. Interest in one's native state is most commendable, but the study of the states as separate and distinct units will, if continued in the higher grades to the exclusion of the more rational view, tend to produce a distorted conception of the relative conditions of the country at large, and thus hinder the development of the broader social idea. The contributions of the vast agricultural and grazing interests of the West, the resources of the Rocky Mountain plateau; the coal and iron of the Appalachians; the cotton and tobacco of the southern coast

plain, and the water and railroad connections between these and the rich disbursing and manufacturing centers—the great cities—will suggest to the intelligent teacher many a lesson of vital interest to the class.

The effects of isolation are well illustrated in the conditions that prevailed in California previous to its acquirement by the United States. The region lay dormant and unproductive during the long period of Spanish occupancy, the Franciscans at the various missions being concerned only in efforts to christianize the Indian peoples. The untold mineral wealth of the country, its productions and natural advantages were potentialities that awaited the Anglo-Saxon intelligence to liberate them into kinetic energies. With the discovery of gold the spirit of the westward movement that had successfully swept over the Appalachian barrier, began that historic march that carried a vast population over the far greater barriers of the Rocky Mountain plateau and the dreadful thirst of the Nevada desert to plant a civilization on the Pacific slope. The old wagon trails were superseded by the railroads, the frontier became only a memory, and the vast civilization reached from ocean to ocean.

The underlying principles of the geographic-social environment, wherever viewed, present three phases or conditions of activity-production, transportation, and consumption. Under the first of theseproduction - will fall the consideration of the agricultural and mineral resources of a region as dependent upon topography, climate, and geological formation of land. The second - transportation - must have as its subordinate topics the topographical features, such as navigable rivers and lake chains, river valleys, the cutting of canals, and the building of railroads along the line of least resistance, by taking advantage of the "lay of the land," as in river gorges and the passes through mountains, or, in the case of canals, low watersheds between adjacent basins either of lakes or rivers. With the development of steam as a means of transportation, feats in engineering skill have accomplished marvelous results-tunneling a mountain range is equivalent to removing the entire barrier, and "lands intersected by a narrow frith" are fied shore to shore by spanned arches or cantilever bridges. The third condition - consumption - involves a consideration of the cities as great centers of population dependent upon two factors of social activity - manufacture and disbursement. Geographical conditions determine the growth of cities under these influences.

A city within easy reach of that highway of the nations, the ocean, and favorably located in relation to certain areas of production, must of necessity become a great city. The question as to what any particular city is noted for will depend upon the characteristic resources of the area of production which it drains. The city of Philadelphia is noted for its numerous manufactures, as a result of its geographical relations with the great anthracite coal fields of the Alleghany Mountains through the valley of the Schuylkill. It is especially noted for its iron industries and shipbuilding, since enormous deposits of iron ore he in a region contiguous to the coal, with equal facilities for transportation to the shipyards of the Delaware. Cities, again, are disbursers of either raw or manufactured products, sometimes of both, though more often but one of the two classes forms the leading commercial feature. The cities of New England are manufacturing cities. The stubborn climate and more stubborn soil of glacial drift offers little inducement to farming, but the bold streams were early taken advantage of as a motive power, and mills and factories rapidly sprang up along the banks, drawing large masses of population about them. Boston, commanding as it does the ocean highway, became the disburser of the manufactured products. Charleston, Savannah, and other cities of the South Atlantic and Gulf seaboard, on the other hand, from their relation to the great cotton, corn, and tobacco-growing region of the southern coastal plain, became disbursers of raw products - much of the cotton finding its way to the factories of the New England towns.

No matter where we turn we see this relation existing between the geographic and social environments. It is only another phase of the universal question of the conservation of energy, the physical environment standing as a potential condition, the energy of which is turned into kinetic forces through the medium of the social intelligence. The interaction of the two environments as expressed in the three phases of commercial activity—production, transportation, and consumption—is the basis of modern civilized society, the tripod upon which rests the perfected structure. The geographic is always the determining factor of the social environment, and the extent to which the latter reacts upon the former, in overcoming the imposed resistances, marks the keynote of a high social development.

The history of the rise and progress of the modern industrial life of England is replete with illustrations of this character. In the

words of Spencer Walpole, speaking of the water ways in relation to the population: "The rivers of Great Britain, and especially those in the south and east of England, have the double advantage of long estuaries, and of draining comparatively flat valleys. The most cursory inspection of the map of England will show that the greater portion of the country is divided into three great watersheds. A large portion of the north of England is drained by the great affluents of the Humber, the Swale, the Ure, the Nidd, the Wharfe, the Aire, the Don, and the Trent. The southeast of England is watered by the Thames and the Medway, while the Wye, the Severn, the Avon, the Usk, and the Parret, mix their streams in the Bristol channel. The great rivers which drained these three watersheds formed originally the main roads of England, though many minor streams, the Ouse, the Yare, the Exe, the Wiltshire Avon, the Itchen, for example, either from their volume or the excellence of their estuaries, were also available for purposes of locomotion.

"As every town is necessarily dependent on a road, so towns in the olden time were usually built on the best roads which were then available, the rivers. In the noblest chapter which he ever wrote, Macaulay tells us that in the days of Charles II the three chief towns of England were London, Bristol and Norwich. Next to them in importance were York, the capital of the north, and Exeter, the capital of the west. Every one of these places is situated, not merely on a great river, but on a great estuary. London owed its wealth and prosperity to the Thames. 'Civitatis fundationis, constructionis, ædificationis causa erat Thamesis.' Bristol, on the Avon, had the Severn at her feet. Norwich, on the Yare, had easy access to the sea, the great highway of the world. York, on the Ouse, had direct communication through the Derwent, the Ure, the Wharfe, and the Don, with every corner of the country of which it is capital; while, through the aid of the Trent, it had another road to the rich midland counties of England. Last of all, Exeter, seated on the Exe, was in close communication with the English channel. So long as the rivers were the best, or even the most practicable, roads in England, the places which had thus acquired the first rank in the kingdom maintained their superiority. But in the middle of the eighteenth century a great nobleman, with the aid of a great engineer, proved the practicability of introducing a totally new kind of road, and eventually effected the supercession of the river to the canal. The difficulty of leading a canal from one town to another

ar.ses from the difference in the levels of the adjoining country. The Chinese, who were apparently at one time the most ingenious of the human race, but whose ingenuity has become stationary under the influence of a cold and indomitable conservatism, were perhaps the first people in the world who designed a canal. The English, who, under the influence of free institutions, and with the encouragement of free trade, have obtained a supremacy in commerce which no other country has ever enjoyed, were nearly the last nation to adopt this useful expedient for the development of their resources. The first canal in England was commenced in 1755, but it was not till 1758 that the great Duke of Bridgewater commenced, with Brindley's aid, the gigantic canal from Runcorn to Manchester, which immortalized its founder's name, and ultimately changed the whole face of the country."

The rise of British industry is dependent upon coal and iron, and the application of steam to labor-saving inventions is set forth with such vigor and clearness by this gifted writer, that I cannot refrain from again quoting his words. "The steam engine, indeed, would not have been invented in the eighteenth century, or would not at any rate have been discovered in this country, if it had not been for the vast mineral wealth with which Great Britain has fortunately been provided. Iron, the most useful of the metals, presents greater difficulties than any other of them to the manufacturer, and iron was probably one of the very last minerals which was applied to the service of man. Centuries elapsed before the rich mines of our own country were even slightly worked The Romans, indeed, established iron works in Gloucestershire, just as they obtained tin from Cornwall or lead from Wales. But the British did not follow the example of their earliest conquerors, and the little from which was used in this country was imported from abroad. Some progress was, no doubt, made in the southern counties, the smelters naturally seeking their ores in those places where wood, then the only available fuel, was to be found in abundance. The railings which but lately encircled our metropolitan cathedral were cast in Sussex. But the prosperity of the trade involved its own ruin. Iron could not be made without large quantities of fuel. The wood gradually disappeared before the operations of the smelter, and the country gentlemen hesitated to sell their trees for fuel when the increase of shipping

SPENCER WALFOLE'S History of England, from the Conclusion of the Great War of 1815, pp. 77-79.

was creating a growing demand for timber. Nor were the country gentlemen animated in this respect by purely selfish motives. ment itself shared their apprehensions and indorsed their views. It regarded the constant destruction of timber with such disfavor that it seriously contemplated the suppression of the iron trade as the only practical remedy. 'Many think,' said a contemporary writer, 'that there should be no works anywhere, they so devour the woods." Fortunately so crucial a remedy was not necessary. At the commencement of the seventeenth century, Dud Dudley, a natural son of Lord Dudley, had proved the feasibility of smelting iron with coal, but the prejudice and ignorance of the work people had prevented the adoption of his invention. In the middle of the eighteenth century attention was again drawn to his process, and the possibility of substituting coal for wood was conclusively established at Darby's works at Coalbrook Dale. The impetus which was thus given to the iron trade was extraordinary. The total produce of the country amounted at the time to only 18,000 tons of iron a year, four-fifths of the iron used being imported from Sweden. In 1802 Great Britain possessed 168 blast furnaces, and produced 170,000 tons of iron annually. In 1806 the produce had risen to 250,000 tons; it had increased in 1820 to 400,000 tons. Fifty years afterwards, or in 1870, 6,000,000 tons of iron were produced from British ores.

"The progress of the iron trade indicated, of course, a corresponding development of the supply of coal. Coal had been used in England for domestic purposes from very early periods. Sea coal had been brought to London, but the citizens had complained that the smoke was injurious to their health, and had persuaded the legislature to forbid the use of coal on sanitary grounds. The convenience of the new fuel triumphed, however, over the arguments of the santtarians and the prohibitions of the legislature, the coal continued to be brought in constantly, though slowly, increasing quantities to London. Its use for smelting iron led to new contrivances for ensuring its economical production. Before the commencement of the present century there were two great difficulties which interfered with the operations of the miner. The roof of the mine had necessarily to be propped, and, as no one had thought of using wood, the coal itself was employed for the purpose, only 60 per cent. of the produce of the mine was raised above ground. About the beginning of the

^{&#}x27;SMILES' Industrial Biography, p. 43.

nineteenth century timber struts were gradually substituted for the pillars of coal, and it became, consequently, possible to raise from the mine all the coal won by the miner. A still more important discovery was made at the exact period at which this bistory commences. The coal miner in his underground calling was constantly exposed to the dangers of fire damp, and was liable to be destroyed without a moment's notice by the most fearful catastrophe. In the year in which the great French war was concluded, Sir Humphrey Davy succeeded in perfecting his safety lamp, an invention which enabled the most dangerous mines to be worked with comparative safety, and thus augmented to an extraordinary extent the available supplies of coal."

Speaking of the effects of these factors—coal, iron, and inventions on the population Walpole further says: "A series of extraordinary inventions at the commencement of the present century had supplied Great Britain with a new manufacturing vigor. Hargreaves, Ark wright, Crompton, and Cartwright had developed, to a remarkable degree, the producing power of man; Watt had given a new significance to their inventions by superseding the feeble and unequal forces which had hitherto been used with the most tractable and powerful of agents. And Davy, by his beneficent contrivance, had enabled coal to be won with less danger, and had relieved the miner's life from one of its most hideous perils. The ingenuity of these great men had been exercised with different objects; but the inventions of each of them had given fresh importance to the discoveries of the others. The spinning jenny, the water frame, and the mule would have been deprived of half their value if they had not been supplemented with the power loom; the power loom would in many places have been useless without the steam engine; the steam engine would have been idle had it not been for coal; and coal could not have been won without great danger had it not been for Sir H. Davy. Coal, then, was the commodity whose extended use was gradually revolutionizing the world, and the population of the world, as the first consequence of the change, gradually moved toward the coal fields. The change was just commencing at the beginning of the present century; it was proceeding with rapid strides at the period at which this history opens, its ultimate effects will be seen later on in this work. The time was to come when the coal measures of England were to draw away the popu-

WALFOLE'S History of England, pp. 71-73.

lation of Ireland; to weaken the power of the southern agricultural counties; to give predominance to the north of England; and by these results to involve a political revolution."

We have here a vivid picture of the action and reaction of the two environments—a luminuous illustration of the point of view we have taken from the study of geography.

The development of civilizing influences in Africa affords another illustration of the same thing. The Africa of our boyhood was the Africa of Livingston and Gordon Cumming, not the Africa of today. It was a land of wild scenes and adventures, teeming with big game, and about it hung that secret of things unknown that makes for true romance. For many years the South Africa of my imagination was as Gordon Cumming and the other great hunters and explorers had pictured it, and it was a somewhat rude shock to learn a few years ago that the quagga was practically extinct and that to find the lion one must go far beyond the Limpopo River in the Zambesi basin. The other day, in looking over a volume of the Stateman's Yearbook for 1895, I found that at that date there were over 8000 miles of railroad in the Cape Colony alone and as many miles of telegraph line. In 1873 there were only 63 miles of railroad. The census of 1891 showed 2230 industrial establishments, employing altogether 32,735 persons. "Among these establishments were flour mills, breweries, tobacco factories, tanneries, and diamond, gold, copper, and coal mines." One may still find the lion in British Zambesia, but it is somewhat incongruous to think of lions when one reads in the Yearbook that "townships at Salisbury, Victoria, Hartley Hill, Umtali, Bulawayo, and Gwelo have been surveyed and marked out," and that at "Salisbury there are government offices, a branch of the Standard Bank, several churches, hotels, and hospitals." "By the new postal route via Bulawayo," continues the Yearbook, "London and Salisbury are brought within thirty-three days of each other."

It is the same wherever we turn in Africa. The railroad and the telegraph are rapidly converting it into a civilized land as population is drawn toward the great productive areas. Transportation here as elsewhere takes advantage of nature's highways—the rivers and the lake systems. Steamboats are plying between many places in Central Africa that a few years ago were almost unknown to the white man. Railroads are being laid along river valleys and settlements are grow-

^{&#}x27;WALPOLE'S History of England, pp. 75-76.

ing into towns whose people are not unfamiliar with the roar of the hon and the snort of the plunging hippopotamus. In the African continent we have a picture of that remarkable result of the planting of civilization - the vanishing of great beasts. Nothing is more impressive than this last stand of that wonderful mammalian fauna that disappears wherever the white man sets his foot. A few years ago the South African veldt was the pasture land of countless thousands of antelope, zebra, giraffe, buffalo, and other big game. Now it is the grazing grounds of the white man's flocks and herds and the corn fields of the world's granaries. Thus does the hand of man suddenly and irrevocably change the aspect of a land. It is the same everywhere. The kangaroo has vanished before the sheep in Australia. The long-horned steer has replaced the bison in our own country, and ages ago, in Eurasia, the wild horse, the wild ass, the wild bull, and the wild sheep bowed their heads to man's will and became the servants of society.

In the ancient world the distribution of primitive populations and the movement that gave rise to the geographical aspects of civilized society at the opening of history were directly the result of topographical conditions. The races of Eastern Asia were dominated by very different physical conditions from those of Western Asia and Europe. As Elisée Reclus has shown in a remarkable paper,' the true and natural boundary line between Europe and Asia lies in a zone extending from the Gulf of Oman to the Arctic Ocean. This zone embraces the desert tracts of Beloochistan to the south, and is continued northward along the rugged mountain walls of Afghanistan to the giant ranges of the Hindu Kush. Beyond this the highlands of the Pamir, or "Roof of World," form a culminating ridge with the Himalayas, Kuen Luen, Thian Shan, and other mountain masses reaching out to the southeast and northwest, and embracing the plateau of Thibet and the deserts of Eastern Turkestan. From the northern side of this mountainous highland the land slopes into the low, brakish plains about Lake Balkash and the Kirghiz Steppe, and is continued north, between the great water ways of the Obi and Yenisei, into the frozen tundras of Northern Siberia. On either side of this sparsely inhabited zone were swarming centers of peoples - the great civilizations of history. To the east were the densely populated plains of the Indus and the Ganges, the peoples of Farther India and the Malay

[&]quot;East and West," by Elisee Reclus, Contemporary Review, October 1894.

Islands, and the great Chinese civilizations in the valleys of the Yangtse-kiang and Yellow Rivers. To the west were the densely crowded Mesopotamian lands, with their civilizing centers of Babylon and Nineveh, the Egyptian civilization in the Nile delta, and the peoples of the Eastern Mediterranean.

Reclus has pointed out the important fact that in the oriental lands of Asia the axes of civilization were divergent for geographical reasons, while in the western lands—in Asia Minor and the Mediterranean—for similiar reasons the axes of civilization were convergent. Upon this hinged all the movements of future history. About the gigantic and almost impassable desert highlands of Central Asia the densely populated lands were strung as a coast fringe of peninsulas, islands, and tropical river valleys. The axes of civilization spread out like a fan, the great water courses of Hindustan, the Indo-Chinese peninsula and China flowing away southeast and east of the divergent lines. The natural tendency in the movements of all these eastern peoples was centrifugal—away from one another—and their isolation was rendered still more complete by the peninsular nature of the coast lands. Thus each worked out its civilization almost unknown to the others.

In the western region of Eurasia the geographical features produced very different results. Everything tended to converge the lines of migration toward the Hellenic Mediterranean, and all movement in the peoples of early history was centripetal - toward this focus. The Persian Gulf, with its head to the northwest, was continued on almost to the Syrian shores of the Mediterranean, through the fertile Mesopotamian valley of the Euphrates-Tigris water way. A comparatively short coast line skirted the desert waste of Arabia along its southern border, and brought the early voyager into the fissure-like Red Sea, with only a narrow neck of desert separating its head from the Mediterranean. The Nile, composing the land of Ethiopia and carrying the rich mud and soil from its equatorial fountains, strung a thread of verdure across the Libyan desert toward the same focal point. From the North, East, and West the low plains and great water ways about the Euxine or Black Sea brought lines of travel to the same point of convergence to the Sea of Marmora. The Grecian civilization was the direct outcome of this centralizing movement of ancient peoples. The Eastern Mediterranean was thus the convergent focus of the movements of the early peoples of Eurasia. Later, however, under the influence of Roman power, it became the divergent focus of a movement which, favored by geographical conditions, spread the centers of civilization successively westward and northwestward along the shores of the Mediterranean and across the plains of Europe to the Baltic Sea and the shores of the Atlantic.

Only one of the diverging axes of the oriental world had any such extensive geographical areas as an outlet for the migrations of its early peoples. This was to the southeast, through the Malay archipelago and beyond over the island-scattered waste of the Pacific. Long before the historic Mediterranean loomed out of the misty prehistoric, peoples of the Malay stock had spread themselves far and wide over the ocean world, voyaging and drifting from island to island eastward and southward, until the farthest clusters were populated. Madagascar, and, in later times, New Zealand, received their population from these ocean voyagers. In time each island and island cluster became centers of different peoples and migration came to an end. The Malay-Polynesian peoples of today differ widely from one another, in appearance, customs, and myths, and in mental development, though still possessing traces of their ancestral relationship The differentiation of these islanders was the result of their island life, each group slowly altering under the influences of their particular island home and the still more potent agency of sexual selection.

America was undoubtedly peopled at a very remote period by migrations from the old world, either by way of the North Atlantic or more probably by Bering Strait. As to the origin of the negro peoples we are left in doubt. Their peculiar characteristics indicate a very ancient residence in the region they now inhabit. They have been isolated from all the rest of mankind from a remote antiquity by their environment of tropical forest. The true negro is always a native of the forest region; the negroids of the East African grass lands being the result of an early mixing of the negro with Mediterranean peoples that spread at a remote period into the upper Nile valley.

What results are we to expect from this outlook of geography as a social factor in education? I trust I have made clear the nature of this social function, and that I can make still clearer the benefit to be derived from the study of geography in this light. The child's mind develops through healthy interest in the primary facts into an attitude of thought that looks for the causes and effects of things. He grows to

see that the central motive of the study is the progress of humanity viewed against a background of geographical conditions. He is led to understand that it is the cooperative labor of men that accomplishes results. The East must cooperate with the West, the North with the South - each with the other in order to build up a strong and vital social community. From his own country he will look abroad with the same thought in mind to other countries and other peoples. He will tend more and more to lose that local prejudice which is engendered by narrow conditions of life and fostered by narrow methods of teaching. He will become more of an American than a Pennsylvamian, and, with a wider experience in the history, literature, and language of the race from which he has sprung, more Anglo-Saxon, though not a jot less American. In other words, he becomes more socially intelligent, and social intelligence is the lever that lifts mountains. With the social intelligence must come the social disposition the deeper appreciation of himself as a member of society. It may not dawn upon him at once; he may never realize in a concrete way what the study has done for him; but if there be any good in him, he will surely become the stronger man, the better neighbor, the more useful member of the social life in which he lives and moves. His sympathies will widen toward all sorts and conditions of men. He will realize better the significance of that struggle in which he and all his fellows are involved. The meaning of faith, and hope, and charity, and truth will be clearer to him. He will have a deeper reverence for nature, a deeper reverence for human life, and an abiding trust in that "something" greater than the social life that "something" that, as Stevenson has said, "guides us, blindfolded but safe, from one age on to another."

THESES.

- I There are two environments the geographic and the social.
- 2 The value of geography as a achool study lies in the contemplation of the interaction of the two environments
- 3. The means for the pursuance of the study in this light is to be sought in the "type" idea.
- 4 The reter basin, as a natural geographic unit, affords the most natural "type" for study. The contemplation of one river basin as a type involves the consideration of other outlying river basins and intervening highlands. The geographic-social features of the entire land area (continental or insular) are thus broadly outlined by the several "types" and their relations.

- 5. The true method of teaching geography is in the clear and vivid presentation of the facts illustrating the interaction of the two environments in any "type."
- 6. The end in view of the study is to develop a social intelligence and, consequently, a social disposition; to break down local prepulate and to produce a broader apirit of sympathy and a tendency toward more efficient cooperation.
- 7. The farthest-reaching effect produced will be the betterment of the social organism through the best possible development of its integral parts the men and women as individual units of the whole.

DISCUSSION: SYSTEMATIC GEOGRAPHY.

By W. M. DAVIS, M.E., Harvard University.

THE theme of Professor Trotter's paper, on the "Social Function of Geography," is a natural development of the teachings of Ritter. At this end of the century, the views of the great German geographer have been wonderfully advanced, not only by the accumulation of much new material, but also by the great progress in the understanding of geological and meteorological processes on the one hand, and by the general acceptance of the theory of evolution on the other. The advance has been indeed a revolution; yet Ritter's desire to study the earth in relation to man is still the chief desire of the modern geographer. The modern point of view is greatly changed from the one occupied by geographers in the first half of the century, and the prospect now disclosed is a much broader one than was dreamed of a century ago; but the intention is still to find a reasonable understanding of the condition of man on the earth.

While welcoming the emphasis that Professor Trotter gives to social and geographical environments, there are two other elements which I should like to consider in relation to the improvement of the position of geography in our educational programs. The first is the invention of a scheme for the systematic development of the subject as a whole; the second is the better preparation of teachers.

Systematic geography is a phrase that may, perhaps, receive condemnation from those biologists who regret the excess to which some systematists have carried the devices of classification in zoology and botany. The excess should certainly be avoided; but the systematic study of zoology and botany has contributed so greatly to the advance of these sciences that I strongly desire to see a similar method introduced in the study of geography. Until it is introduced, I do not believe that geography will gain a high position in the scientific world. For example: today, in the absence of a recognized system of geography, no clear distinction is drawn between travelers and geographers. Geographical societies receive into their membership various persons

who have no other claim to such distinction than that they have been in remote countries, and have returned safely home with such items information as their untrained skill enabled them to gather. This is not true of zoological and botanical societies; something more than general observation of plants is needed to make a person a zooiegs or a botanist. No explorer would venture to report upon the flore of fauna of a region, if his knowledge of plants and animals were no greater than that minimum received during his boyhood in school, but the pages of geographical journals are constantly occupied by the reports of travelers who have given no attention to systematic geography since their school days, and who then were taught in such a war that they learned little more than places and boundaries. This condtion of things is extremely suggestive of the position held by geography among the sciences. I would not lessen by a single page the contributions made to geographical literature by those strong, energet c. brave men who penetrate unknown regions and bring back to us who stay more quietly at home as much as they can remember of what they have seen; but I should like to look forward to the time when the successors of the explorers of today shall be better prepared to take advantage of their opportunities for observation in strange lands, so that their reports shall more completely represent what they have seen.

Various lines of progress will lead to this end; but I believe that no single one will be so important as the gradual introduction and establishment of an acceptable system of thorough geographical study. The subject must not be dropped on leaving the lower schools, it must be cultivated in the high schools, colleges, and universities. Not until thus recognized all along the educational line will its elementary presentation contribute all that it should to young scholars. It is in the direction of the systematic development of one branch of geography that my own efforts are constantly directed, and I desire to submit a few illustrations of a scheme upon which I am experimenting in my winter and summer classes.

In the first place, the organic and inorganic, or, as Professor Trotter has called them, the "social" and the "geographical" sides of the study must be distinguished. If the interaction of these two sides is to be understood, each must be attentively studied for itself, and only as the knowledge of each advances can the relation between the two be understood. It would be as impossible to discover the ratio between

two numerical quantities before both were known, as to discover the relation of man and earth before learning the organic habits of the one and the physical conditions of the other. A thorough and scientific understanding of these two sides of geographical study is essential to the all-round geographer; and it is a regret to have to say that, as far as my knowledge goes, there are very few persons in this country thus trained. We have not a single university in which a geographer, thus defined, occupies a professorial chair. As long as this unfortunate condition of things remains, geography will make slow progress in secondary education; for until a subject is recognized and well supported in the colleges and universities, it must languish in the schools. Latin, history, and other flourishing and well-taught subjects might today be in the unfortunate condition of geography, if they had not a traditional place in the college and the university.

Leaving the habits of man to those who attend to this interesting field of study, let me briefly analyze some of the conditions of his physical environment, which all together make up "physical geography," or, more briefly, "physiography." Passing over the earth as a globe, the atmosphere, and the oceans, let us come at once to the chapter of land forms. It must be noted that while there are large and manifest relations between races and continents, these relations are only the summation of minute relations between individuals and their immediate surroundings. Hence, the study of land forms should certainly proceed, at least to such detail as shall give a clear understanding of what may be called the "landscape;" that is, so small a part of a continent as may be perceived in a single view, and thus affect the action of a single man. It should further be noted that however far an explorer may travel, his total impression must consist of the integration of many successive landscapes; and until he can understand and describe them individually, he cannot hope to make anything more than a very rough picture of them as a whole. As well try to study botany by looking at an entire forest; or ethnology by glancing over an assembled tribe. Truly, the forest and the tribe are natural groups of forms; but they can never be understood until the units of which they are composed are attentively examined. Still again, when a teacher attempts local excursions with her class, she can make little progress beyond the merest elements if she cannot analyze and explain the landscape before her. For all these reasons, I would urge that systematic physiography should be carried to such detail as shall take

account of the elements of the landscape. Geography will never attain a worthy position until this need is satisfied.

How shall the study of the landscape proceed? But a few decades ago the most advanced geographers were satisfied to describe near all land forms in a purely empirical manner; necessarily so, for little was then known of their origin. It is true that volcanoes and sand dunes and deltas have had something of explanation for a long time and in recent years a significant advance has been made in the treatment of valleys, for they are now commonly ascribed (often in a halfhearted way) to the erosive action of rivers and not to convulsions of the earth's crust. But great strides have been made in the understanding of land forms during the last half of our century, and although many of the more peculiar forms still need further study, no one should doubt that these problematic examples will in due time yield to the same rational methods of investigation that have now been so success fully applied to their simpler fellows. Scientific geography must, therefore, demand that physiography shall furnish rational explanatory descriptions to accompany the descriptions of all factors of our physical environment. A similar treatment should be developed for all the elements of human behavior. Nothing less will suffice.

Now there are certain simple and fundamental principles of essential importance in the study of land forms. (1) Any part of the land is but the surface of a certain structural part of the earth's outer crust This structure and its attitude with respect to sea level are determined by various processes that need not be considered here. (2) The land is attacked by various destructive processes, which may collectively be called weathering; and the loosened products of weathering are removed by creeping and washing down hill toward their ultimate goal, the sea. It follows from these two fundamental principles that the form of any part of a land surface depends partly on the structure of the district, and partly on the amount of destructive work accomplished by weathering and washing. Many variations may be played on this general theme. Structures occur in great variety, and each one has its characteristic expression in an early, mature, or late stage of the destructive attack of weathering and washing. Special features are found under special climatic conditions, where blowing wind or scouring and dragging ice take the place of washing streams. All these complications should be attentively considered in the thorough study of systematic physiography. The task would be very difficult, were it

not that the same general theme runs through it from beginning to end, and gives reasonable correlation to a host of details that are otherwise arbitrary and meaningless. It would require nothing less than a treatise to expose all this in sufficient fullness for easy understanding; but the brief statement here made may suffice to indicate the line of investigation that seems most promising in the physiographic division of geography.

Do not misunderstand me to mean that young scholars should thus plunge into the advanced phases of the subject. Far from it. My meaning is just the reverse. Young scholars must begin with the elements and proceed in an orderly manner from the simple to the complex. But who shall say what are the simple elements; who shall arrange the order of presentation so that it shall lead in good order from the elementary to the more difficult examples? Can this task be performed by those who take only an elementary, a superficial, an empirical view of the subject? Certainly no such leaders would be followed in any other; and there is no reason to think that they would make good guides in geography. There can be no scientific order of treatment laid out but by those who survey the entire subject in a comprehensive manner. Hence the importance of the recognition by teachers of all grades that what geography most needs today is thorough scientific investigation, in order that a rational, and not an accidental or empirical, plan shall be followed even in its first lessons. One of the most useful results of a scientific method of study will be found in a rational classification of land forms, as well as of other factors in our physical environment. The classification will not serve merely to put things away in proper order, but to find them easily when wanted. It will aid the explorer by directing his observation where it will lead to the most significant results. It will aid the teacher by pointing out the most elementary examples with which to begin, and by suggesting a rational sequence of examples for progressive study.

Arithmetic, algebra, and geometry have been logically arranged in schoolbooks for a long time; the sequence of successive steps in the development of each subject being very carefully considered. I do not mean that no improving changes have been or can yet be introduced in the order of presentation of these several well-established subjects; but that the order now usually adopted is the result of much consideration. In history it is quite otherwise. Historians do not yet venture to proceed in any but the arbitrary chronological order. The examples

that come first are certainly early, but they may not be easy examples of historical occurrences. Perhaps the chronological order is necessary, so as to string the more important events in their proper sequence; but it is empirical rather than scientific, if historical occurrences are to be treated as events following causes. An experiment on a course in history that shall begin with simple causes and events and proceed to more complicated causes and events would certainly be interesting, to say the least; but it would be so much of an innovation that any historian who may happen to glance over these pages will probably call it impracticable, if not absurd. And yet, if history is to be rationally taught as a great accumulation of consequences following causes, and not as a tiresome series of arbitrary happenings, simple examples must be presented before complicated examples; and the order of elementary presentation must be based on thorough study and classification of all relevant facts by the advanced historical investigator. The same may be said of geography.

On this last point I wish to delay a little, for it is not clearly brought out in Professor Trotter's essay, although it may perhaps be recognized between the lines by one already acquainted with it. The concluding recommendations imply that a river basin, being "a natural geographic unit," and affording "the most natural type for study," is the natural elementary example with which to begin. This seems to me open to serious question. To my mind a young coastal plain is much simpler than a river basin; certainly far simpler than the Hudson River basin, selected for illustration by Professor Trotter, for that example is highly complex. The Hudson might serve well enough for the first example in an empirical scheme, although it seems to me a difficult example for the beginner to understand; but it cannot be placed early in a systematic scheme, because it involves the complex combination of so many different types of form. There is no indication that, in selecting the Hudson River basin, it stands in Professor Trotter's plan as a member of a well-chosen series of forms, whose study shall lead young scholars in a systematic manner through the most important principles of physiographic and geographic science A coastal plain has a higher recommendation; for of all land forms, it has the simplest explanation, and its understanding leads most naturally and simply into the rational understanding of a long series of more complex forms.

It is the same with the human element. By all means, give it

strong emphasis; but in order to ensure that its importance shall be properly grasped, it is necessary to introduce elementary examples first, and more intricate examples later. I can hardly doubt that Professor Trotter appreciates the importance of this principle; but it is probable that many readers of his essay will fail to apprehend it as an essential element of a well ordered course in geography. Savage tribes must, I believe, be studied first; because only among savages do simple and immediate relations between physical environment and human habits control the greater part of the social economy. A valid reason for introducing an early account of more civilized peoples is that our schools are situated in the midst of such a people, and hence in so far as this side of geography is based on local observation, it must make a start on a complex example. But on the other hand I question whether school children can to advantage become so introspective as to open the study of mankind with a study of themselves and their neighbors. Moreover, the savage, although distant, never fails to excite interest in young classes; probably from the unconscious kinship between the rude conditions of the human race and the undeveloped conditions of childhood. My own habit in this division of the subject is to begin with such examples as the dwarfs of the equatorial forests of Africa and the Eskimos of Greenland, and from these primitive peoples to illustrate one of the consequences of the globular form of the earth. Later I would take such examples as the wandering Bedouin of the Sahara and the Indians of the Amazon forests, for illustration of the consequences entailed by the systematic planetary circulation of the atmosphere, in producing and deserts in one region and abundant rain in another. Still further on come illustrations of the terrestrial elements of climate; that is, those elements which depend on the oblique attitude of the earth's axis to the plane of its orbit; such as the floods of the Nile, the necessity of irrigation in southern California, and the habits of thrift engendered in climates having a winter that can be survived only by gathering a summer harvest. It is too commonly the habit to separate these causes and consequences by much irrelevant matter. The account of the Seri Indians of Sonora by McGee, and of the Canoe Indians of Patagonia by Hatcher (National Geographic Magazine, 1896, 125-133; 1897, 305-319) furnish admirable examples with which to emphasize the relation between physiographic environment and human conditions. A lecture by Fewkes on "The Tusayan Ritual of the Hop: Indians of

Arizona" (Smithsonian Report for 1895, 683-700) also deserves wide reading from the clear picture that it presents of a relation between climatic surroundings and religious ceremonies. But before all this good material can find its way into our schools, it must be well classified and systematized. To introduce one item after another at random would be as unfortunate in geography as it would in botany or zoology.

How excellent it would be if, after the more thorough physiographic and ethnographic exploration of the world by scientific investigators, we could begin the systematic study of geography in school with an account of a primitive people living, undistributed by too many "civilizing" influences, upon a young coastal plain, the simplest of all land forms. How excellent to follow this elementary example with a well-selected series of examples of advancing complexity. How different would geography be when thus treated from geography treated in the empirical manner so long prevalent.

Let me refer to another example in Professor Trotter's essay which seems to me to lack the element of systematic development. He introduces the simple fact that "the earth is round." Now, remem bering his main theme, we might expect to find that this simple and all-important fact would be followed by its consequences in the geographical relationships between earth and man; but instead of this we read a bit of narrative evidence to show that the earth is round. By all means introduce this and other bits of evidence; but do not omit the real geographical consequences of globular form. One of the most important and at the same time generally overlooked consequences is the capital fact that an earth as nearly globular as ours is everywhere nearly level; nowhere broken by vast ascents and descents. such as a cubical earth must possess; and hence the globular earth greatly facilitates migration, commerce, and travel. Judging by the effectiveness of mountain chains as barriers, it is manifest that the general movement and intermingling of organic forms over the earth has been possible only because it is almost globular. Again, on a globular earth, gravity is almost uniform at all points; hence the muscles that will serve to support a man's weight in one part of the world will serve as well in another; the weapons and utensils that can be used in one country can be used in all parts of the world, as far as their weight is concerned. Tell of Magellan, by all means; but in illustration of the influence of environment, do not omit these capital facts that have for ages been among the fundamental controls of the

distribution of organisms on our planet, and that have never been more active than today, when the fields of one continent feed the factory workers of another, and the factories send their products to the workers in the distant fields.

As to the rotation of the earth, pretend for the moment, if you like, that a giant set it whirling, but do not omit the geographical consequences of its rotation. The division of time, the definition of directions, the habit of alternate working and sleeping, the device of using a simple network of circles over the earth as a means of indicating relative positions and thus finding one's way on land and at sea, the habit among civilized nations of employing some of these circles as boundaries between unoccupied territories; all these are devices and habits that follow as naturally as sunrise and sunset from the fact of planetary rotation. There is nothing novel about them; they do not require advanced study for their sufficient understanding, but they do need and deserve proper association with their control. To say that the earth rotates once in a day implies that a day is otherwise determined than by the rotation of the earth. We ought to say that the time required for one turning of the earth is the measure of a day. To say that the pole is north of us implies that something else than the position of the pole determines the direction that we call north. We ought to say that the turning of the earth singles out its poles as points with relation to which we can refer directions in all parts of the globe. Working and sleeping, day and night are not predetermined necessities; they are inbred habits, characteristic of the occupants of a rotating planet. So habitual has the alternation of labor and rest become; so essential is it now to the human physiological constitution that it is retained by the Eskimos, although they have wandered to a latitude where another habit might have originated. Their days and nights are so long that they sometimes measure time by "sleeps."

All this touches on the "causal notion in geography," so well advocated by McMurry in an early number of the Journal of School Geography (1897). But in addition to the importance of the causal notion there is also the importance of the systematic notion. In the illustration of method given by Professor Trotter the capital fact that the earth is round does not receive sufficient consideration under either of these headings. The emphasis that he gives to this subject ought, it seems to me, to be differently distributed; otherwise, his readers

will not gain just ideas of the relative values that should be attached to the various elements of geographical study.

What I wish to say about the preparation of teachers does not so much concern the single subject of geography as it concerns the audience to which these pages are addressed. In recent years I have had a considerable experience with school-teachers, partly in general lectures to teachers in Boston and elsewhere, partly in my summer courses on geography at Harvard, where the class is composed almost exclusively of teachers and superintendents. The fact that has impressed me most forcibly in this experience is the utter disproper tion between the mental equipment on the one hand, and the capacity of both the teachers themselves and their scholars on the other hand Many of the most elementary principles regarding physiographic matters, many of the most manifest principles regarding man's condition as an occupant of the earth, many of the most simple devices by which observational methods in geography may be advanced, seem to strike these teachers as novelties. This cannot be because the teachers represent the ill-informed division of their profession, for those whom I have met are distinctly among the better informed. It is simply because they have not been well taught. It is time that this national association called a halt in a method that results in the appointment of poorly prepared teachers. It is time that the teachers themselves, on learning of their deficiencies, should protest that their successors shall be better equipped than they are themselves. While it remains as easy to satisfy the requirements of school boards regarding geography as it is today, we cannot expect that students intending to be teachers will give much of their time to a subject that is discounted by their future employers. A few of the more serious and earnest students may, at their own risk, decide to prepare themselves adequately for the presentation of a great subject; but the great mass of the future teachers of geography will not be much better prepared as long as superintendents demand so little knowledge from them. Frequent inquiries reach me from superintendents and others regarding Harvard and Radcliffe students competent to teach geography, and it is generally necessary to answer that our students feel so little need of making special preparation in geography that very few of them have given it the attention that deserves commendation; and the majority

of the few who have reached a commendable stage are looking for some other occupation than teaching geography. The inquiring superintendent, then, perhaps, somewhat disappointed, decides that he must appoint the "best candidate he can find," and so the habit of accepting the services of an insufficiently prepared teacher is confirmed. It would promote progress if a superintendent should say: "I will temporarily appoint the best person I can find; and, in the meantime, will announce that in one or two years I will select for a permanent teacher one who has made serious preparation for teaching geography." I believe that this is a practicable scheme, and that it would soon lead to perceptible improvement if it were strongly advocated by a body so representative and influential as the national association.



THE DISCUSSIONS AT CHATTANOOGA.

FEBRUARY, 1898.

Containing remarks made upon the papers of Professor Arnold Tompkins on "Observation and Apperception," and on the translation from Frick and Friedel on "The Application of the Principles of Herbart to Secondary Schools." The original papers are contained in the supplement to the *Third Yearbook*.

DISCUSSION: OBSERVATION AND APPERCEPTION.

By PROVESSOR EDWARD F. BUCHNER, School of Pedagogy, New York University.

I know not whether I am critically wise upon this topic which has attracted attention and commanded thought throughout the ages—albeit under various forms of statement. And I am at present uncertain that it is for me, on these historic fields, to offer to do battle in the name of a careful psychological analysis, or, to present a few articles of agreement in the treaty of pedagogy. My words, at least, must proceed in a twofold manner as those of a psychologist, having at stake the integrity of an analysis and interpretation of human consciousness, and as those of a teacher who turns analyzed mind over to its pedagogic claims upon the manner and material of instruction.

It is somewhat interesting to reflect upon a certain form of omission in the development of educational thought. We await a shrewd and truthful analysis of the postulates of education. The metaphysics of pedagogy has yet to be written. Education cannot be brought under one category, "one dominating life purpose," as sufficiently explanatory of all the elements, processes, and products involved.

It seems that pedagogy, in the topic of this discussion, would force us to face the hard, fixed distinction between a particular perception

and a universal thought, which confronted philosophical efforts until 1781, when Kant thrust it aside by asserting synthetic apriority as implied in the very possibility of experience itself. So Professor Tompkins has removed the crux by maintaining both the matter of fact and the truth of reason: that observation is the factual expression of any possible apperception. The necessity of all this has been brought upon us by our wonted processes of abstraction, first saying observation is distinctively one thing, apperception another, and then turning about to undo this fence building by trying to show how the two are each other!

These theses, while abstruse, are very interesting in exhibiting an acute dialectical reduction of the two terms of the title to a unity. They are comprehensive, and, taken with their intents, can enter into any man's pedagogic creed. But they are not free from many defects, both in their construction and their truth-expressing capacity.

- 1. A strong exception must be taken to the ambiguity in the terms "universal" and "object" in the first thesis. The deduction of "universal spirit" is too generous—like the night when all cows are black, as Hegel said of Schelling's philosophical method. An "object" is never "material," but always a conscious presentation, possessing at bottom a nature common to thought.
- 2. This thesis offers no grounds for the distinction between perception and judgment. To say it all is mind, is happy, and safe, for no one can successfully attack in such a retreat. Sensation, as lying at the core of observation, and judgment, the initial and irreducible process underlying apperception, are disparate, as to their origins, functions, and correlations. "Syllogistic" perception is too high an order of mentality to be called perception solely.
- 3. The dialectic is faulty, in passing on to the fourth thesis, in not showing how the "future, ideal self" is an affirmative reconciliation of the negation of the particularity in an apperceived "object."
- 4. The enlargement of the self, as detailed, is a process of intersusception, an entanglement in which the two ends are lost. "Self" and "object" really arise out of conscious processes and contents, and not out of one or the other. At the beginning of psychical activity, so far as analytically traceable, neither is present. The reasoning about "interest," based solely upon an etymology, is obscure.
- 5. Psychology, at least, must recognize analytical facts, antithetical though they be. Knowledge and conduct, instead of submitting to any

reduction to unity, depart, rather than coalesce, in the course of mental development; though it is true that ethical ends are unique. Every hod-carrier must be virtuous, is life's demand.

As a few positive criticisms, I submit the following suggestions for your consideration:

- 1. The theses do not make room for the radical differences in observing and thinking presented in pupils. The vital point in pedagogy is that it shall recognize types of individuality in thought, as well as in feeling, and not constrain all minds, either by methods of teaching, or objectively arranged courses of study, into one ideal mold, however interesting and valuable that ideality in itself may be.
- 2. Differences must not be swept away. There are certain points of departure, matters of fact and event, which form the absolute limits of conception, and back of which thought cannot go. Pedagogy, too, must recognize the terminus ab quo.
- 3. The development of apperceptive groups of ideas at a too early stage becomes a real hindrance to the later life of mind. A fulsome mental growth is insured only by the presence of a certain spontaneity in light of the expansive character of all thought.
- 4. The road from observation to apperception, is, for pedagogy, paved with fixed associations, as concerns the conscious processes, however true it may be that assimilative consciousness is synthetic. Thus, the correlation of studies is only an objective means of fixing some of these associations.
- 5. Apperception in psychological theory has been too great a pit for pooling conscious aspects and elements, such as conception, assimilation, psychic reverberation, etc.; but it does not tell us precisely that which is in consciousness during the process.
- 6. Apperception is a logical theory; at any rate, to make the theory intelligible, there is in evidence a recurrent need of resorting to the logical relations of ideas, rather than to the features of the actual thought processes involved.
- 7. Our practical need as educators is not so much the need of a refined analysis, as an intelligent catering to the time processes of the consciousnesses with which we deal.

OBSERVATION AND APPERCEPTION.

APPLIED TO HISTORY.

By PROFESSOR MARTIN G. BRUMBAUGH, University of Pennsylvania.

PROFESSOR TOMPKINS has carefully defined the thinking process, and materials in consciousness in the thinking process, the scope and meaning of observation, the unity of mind-action in all its activities, and the growth of the self or the apperceiving mass through observation.

The discussion necessarily leads to interest, which is defined to be "between my present, real self, and my future, ideal self."

Observation is held to "involve the whole process of life," and again it is asserted that "interest includes observation." Just how interest can include observation and observation involve the whole process of life one cannot readily see. Evidently interest is here used with some license, or observation has outgrown the limits the writer assigns it.

But interest etymologically can scarcely be interpreted to mean between in the sense of intervening, as say a barrier, between the real self and the ideal self. Indeed, if "what I am measures what I think," and if "the universal is the mind of the thinker himselt" one is at a loss to understand how there can be such a thing as an ideal self, i. e. a future completed self consciously present in the thinking process: since the universal and only thing of thought present with the individual or one is the present or real self. There can be, then, no such conclusion as that "ideals of life determine the scope and character of one's observation." From this view of the author I must dissent

Interest is rather to be regarded as between in the sense of participation, as when two boys share a peach between them. The two that participate in any thought process are the present individual and the present universal, and interest is the recognition of commonalty in the two. It is common the two. Interest is simply the measure of the feeling of this common element. So in mathematics interest is the quantitative measure of the held-in-common object. Unless there is

an overlap there can be no interest, and the measure of interest is the measure of the overlap.

Observation is the measuring process, by which the interest is determined.

Observation is thus seen to be the process of realizing interest. The end of all observation is interest. "Interest, not knowledge, is the purpose and aim of all instruction."

It follows that interest is dependent upon observation and leads to will. Hence the steps to character are observation, interest, will. But in this analysis observation corresponds to intellectual activity in its entirety, and interest must then be most akin to the feeling life of the child. So we find our author declaring that interest arises only as "the object is felt to be between" the two selves.

From this view there results not only an intellectual interest, but an emotional interest as well, since observation includes all the mind's activity. It seems, therefore, that breadth of interest, "many-sidedness," is promoted by many-sided observation—such observation as reveals the largest possible realm of commonalty in the objects present in consciousness.

Some studies will best lend themselves to one form of observation, others to some other. One will likely not go far wrong in asserting that history, and for that matter most subjects of study, will culminate in the greatest interest, and hence in the richest character, only as its data are observed sympathetically, æsthetically, socially, and religiously. These forms of observation, arousing corresponding interest, determine the materials of history. The self or the "apperceiving mass" must find in the historic fact a large element of its own content. At the outset it cares little for time or space limits, and hence "once upon a time" and "away off in a wood" are better preludes to the beginner's history than extensive categories of dates and places. The fairy tale is all the more the source of interest because it is timeless and spaceless. Nor does the child at first ask, "Is it true?" unless an overcautious parent or teacher has destroyed the glory of childhood's wonder.

Webster, in one of his addresses, declares: "There is still wanting a history which shall trace the progress of social life. We still need to learn how our ancestors, in their houses, were fed, lodged, and clothed, and what were their employments. We wish to see and know more of the changes which took place more and more in the homes of

the first settlers." If one broadens this to include the other forms of observation, the sympathetic, the æsthetic, and the religious, the character of his true material is clearly defined. One vivid picture of an early home, clearly and fully observed, will drive the child to history. The child cares for every detail; the acts of benevolence; the words of cheer; the nameless ministrations of loving hearts, of willing hands. the toil for bread; the struggle against foes, human and brute, the triumph of goodness in the actor; the punishment of the wrong doer, the recreational delights of holiday; the accompaniments of wind and rain, and every other fact that can with depth of feeling enrich the the observing self. Such lessons, well wrought out, create the soul of interest, and lead the child into historic research with an enthusiasm that insures this rich content of history a permanent place of vantage in all the activities of the mind. They do vastly more -they build a kinetic interest, an interest that touches will, fashions character, makes a noble life.

OBSERVATION AND APPERCEPTION.

By PRINCIPAL R. H. BEGGS, Denver.

[The following is the contribution of Principal Beggs to the discussion of the theses of Professor Arnold Tompkins, which were presented at the recent meeting of the National Herbart Society at Chattanooga.]

In discussing the theses before us, I am relieved of one common cause of anxiety. One is generally in danger of wandering from the main theme, but since observation is found to embrace all mental activity—in fact to "involve the whole process of life"—it is clear that I need indulge no fears lest I find myself, by and by, outside the limits proposed for this discussion. I can hardly "go off on a tangent" when the matter in hand is an all-embracing sphere.

While indorsing, in a general way, the first four propositions under discussion, I am unwilling to accept the general conclusion stated in the fifth. Whether the mind be a bundle of faculties, or an undifferentiated spiritual amæba spontaneously evolved from ideas inveigled into the soul through sense perception, is a question entirely devoid of interest to me as a teacher. Whether I believe in the corpuscular theory of light or the undulatory, I turn on the electricity when it

grows dark; and whether there are two electric fluids or one, or none at all, I keep my hands away from a "live wire." I do not know whether there is a memory faculty or not, but we all know that the mind can be trained to remember, and to perform this office in a variety of ways. The hat-taker at the hotel has a marvelous memory, and it is his chief stock in trade. The "star waiter" has a memory equally valuable to him in his vocation. But let these two change places, and both, for a time, would be utterly helpless. Let them both read these theses a dozen times, and neither could repeat a single line. But call Wun Lung up from the laundry, and let him read them twice, and, provided he has preserved his school-day memory, he will repeat them verbatim from beginning to end, though not the ghost of an idea of their meaning has entered his brain. In short, whatever memory may be, it can be marvelously developed and wonderfully specialized; and whatever the teacher's psychology may be, he knows that the mind, like everything else in organic creation, gains strength along any particular line by responding to reasonable demands in that specific direction. Whether or not we shall give special training to develop the mind in certain specific directions depends wholly upon the utility to the individual of such specialization.

It has been demonstrated again and again that the mind can be trained to record almost every impression received through a sense organ, and it has just as often been proven that such training is, for the average student, not only of little value in any direction, but absolutely harmful in several ways.

It has frequently been pointed out that attention to everything seen or heard is fatal to concentration of thought; and without this concentration no great intellectual results can be attained. In our elementary lessons in physics we learned that power and time are the factors that determine the amount of work performed.

The old formula "PXT-W" holds true in the realm of mental effort also, and with most of us "T" must be made very large to secure an appreciable product. But the mind cannot dwell to any purpose upon any given problem if required meanwhile to note each trifling sight and sound. It is, alas, too often true that

"The eye it cannot chose but see We cannot bid the ear be still;"

but when it is true, the best intellectual work is impossible.

Superficial observation is harmful in another way. The mind that is engrossed in merely noting the multiplicity of facts presented by the senses, has little power available for noting causal relations - little capacity for observation in the broader sense in which the term is used by Professor Tompkins. If the mind be too much occupied in this way it acquires the habit of receiving new ideas with the ininimum of mental activity. Do what we will, the mind must receive numberiess ideas without noting their bearing upon previous acquired facts, and necessarily without wedding these facts in such a manner as to bring forth new ideas. The habit of passively receiving is already strong when the child enters school, and it should be our purpose to counteract, rather than to confirm this habit. Much of our so-called nature study is pernicious. Children are called upon to observe facts that can be apprehended only in the most superficial way, and, when in their proper place, these facts are again presented they lack the element of novelty, and interest is correspondingly weakened. By injudiciously adding to the "apperception mass" it may be virtually diminished.

By the way, this is not the only class of negative apperceptive quantities. Certain facts may awaken prejudice that materially interferes with the reception of other facts.

"The rogue ne'er feels the halter draw With good opinion of the law."

This antagonistic feeling toward new ideas may be aroused in a very different and seemingly irrational way. Dislike toward a teacher is readily transferred to the ideas he presents, hence it becomes a matter of great importance that the relations between teacher and pupils be pleasant. The well-known phenomena, whose explanations are sought in the culture epochs theory, prove that there is an element in apperception not recognized in Herbart's theory of the growth of the mind, and one that cannot be ignored without serious loss. But the mind may repel as well as attract ideas by other means than through its previous acquisitions, and this fact, while relatively unimportant, deserves to be recognized.

But the acquisition of new facts through what is usually called observation, and the association of the these facts with previously acquired knowledge, is of small importance compared with the acquisitions possible through observation in the sense in which we find the term used in the thesis under consideration.

William Hawley Smith says, in one of his lectures, that the great problem of life is to straighten out the interrogation point, and he who succeeds in the task transfers it into the mark of surprise and admiration. Of course he assumes that we are all familiar with the famous recipe beginning, "First catch your hare." How few people there are that ever catch the hare. How few ever see an interrogation point.

In my school days I was required to learn many things about plants and animals; and, with specimens at hand, was directed to "observe" certain things. But I was expected merely to see with the physical eye; mental vision was almost never called into service. A physical peculiarity had no story to tell of the present or past environment of the organism to which it belonged. From my boyhood I have occasionally seen the moon in eclipse and admired its coppery hue; but not till very recently did it occur to me to ask how it is possible to see the moon when in the full shadow of the earth, and whence it receives the reddish light by which it is visible; and yet I am a great deal like other people. While yet attending school I learned the story of Paley's watch, and learned also to substitute a little god called "evolution" for Paley's deity. I studied and taught both chemistry and physics for years without ever asking whether the facts in these sciences showed the same adaptation of means to ends that is exhibited by organic nature. I did not see the interrogation point, so I did not learn that if water, in its various forms, had merely the average capacity for absorbing heat without change of temperature the best part of the earth would be a barren wilderness. For the same reason I did not learn that if the fusing and the volatilizing points of water were changed with those of any other ordinary compound known to the chemist; or if it assumed an amorphous instead of a crystalline form in solidifying; or if it lacked its solvent properties, the whole earth would have been a lifeless barren waste. Nor did I learn that if high magnetic properties had been given to any one of the rare metals instead of to iron, the chances are that the compass would still be unknown, and that certainly electricity could never have been utilized on a large scale. I learned and taught that light is, under certain conditions, refracted and reflected, instead of going straight through, as do the Röntgen rays; but I did not learn that without these seemingly accidental properties, man could never have invented a lens, and that our little god evolution could never have constructed an eye. I learned

that the rays are not equally refrangible, and that this fact gives the optician no end of trouble; but I asked no question concerning the utility of this fact, so I did not learn that, could the lensmaker base had his way, not only would the flashing colors have been taken from the diamond and other gems, and the rainbow from the receding storocloud, but no bow of promise would ever have spanned the dark cloud of mystery that through all eternity must have shrouded in utter dark ness the entrancing world revealed to us by the spectroscope. I learned that heat and electricity can be transmitted by conduction; but I did not learn that if, in the grand raffle of nature, when each atom, each form of energy, drew its numerous characteristic properties if, at this fateful time, heat and electricity had but changed conduction tickets, the torch of Prometheus would have been a far greater curse than Pandora's plague-dispensing box.

But I will not weary you with further illustrations. We do not find the interrogation points, and, of course, we do not hainmer out their curves. We know, as Agassiz has told us, that facts are God's words, and that if we spell out these words by observing and studying the facts of nature, both organic and inorganic, and then arrange them in their proper order, they will form beautiful sentences, revealing the very thoughts of the Creator. But we stop short when we have spelled out a word; we do not ask its meaning, and we make no attempt to place it with other words in such a way as to reveal a thought.

And right here I cannot forbear pausing to say that to believe that the various forms of energy and inorganic matter were alloted their peculiar properties by chance, greatly overtaxes my credulity. Men have been for ages deciphering words in the great volume of nature, and have found "benevolence" and "design" written on every page, yet they have nowhere found such a word as "happen," or "accident, and one is warranted in affirming that in all the great lexicon of God there's no such word as "chance."

But how are we to teach our pupils to become observers in the broader sense of the term? How can we help them to find the interrogation points? We have not gone very far in solving the problem, but I believe we are moving in the right direction. We do not teach botany and zoölogy as they were taught a generation ago. We are not so much concerned now about the shape of a flower as the reason for its shape. Children now do not learn that birds rob the cherry tree, but that the bird renders service for what it receives. The flower

pays the bee in nectar, the wages duly earned. At first glance the child sees a thousand lives go out that a tender-hearted girl may wear a silken scarf; but we bid him look again and see that through man's agency a thousand of God's humbler creatures are called into existence and carefully nurtured, that this same scarf may be secured. His physical eye shows man a cruel monster devouring the flesh of weaker creatures, but through the teacher's help the mind's eye sees that no flocks nor herds would gladden the meadows, no feathered tribes would enliven the barnyard, had man no want that these creatures could supply. The teacher of today points out that "Ich dien" is the motto that nature has given to each living thing, from the humblest plant up to man himself.

The general introduction of so-called nature study into our schools has afforded occasion for much waste of time, but when we learn to look for the interrogation point concealed beneath each fact—when we learn to observe intelligently—this recent addition to an already overcrowded course of study may yet serve a purpose never dreamed of by many of its enthusiastic advocates. If throughout the grades the child is led to observe those things that will arouse thought and reward research—if he is guided in finding such interrogation points as he can straighten, a habit will be formed that will be worth far more than all the bald facts that he may acquire.

But while the school curriculum remains as now, a few well-tried subjects will still be the chief means of intellectual development, and it has been suggested that I consider mathematics with reference to the topics under discussion. To the observation enthusiasts referred to by Professor Tompkins, the subject presents few attractions. There are no wheels to go around, no pyrotechnics, no bad odors, no noises. But the thoughtful teacher need not despair. For a certain kind of observation we have here a limitless field. We begin with a few simple definitions, a few self-evident propositions and problems, and observation does, or at least may do, the rest. It is said that we may teach all the mathematics required in our schools, by simply asking questions. In other words, all the facts may be obtained by systematic observation. Of course this observation must be guided. The beginner cannot find the interrogation points - the teacher must supply them - must ask the questions. Unfortunately we have so much ground to cover, that we point out too much - require the pupil to observe too little. Because we must store his mind with facts, we adopt the most expeditious means of attaining the end, forgetting that greater power is gained only by utilizing that already possessed. However, the teacher cannot do all the work—the learner must see some relations at each step, and in time he acquires the power of more or less independent thought—he finds some interrogation points for himself. In this study the ideas acquired must be retained and used—they are the implements for acquiring new ideas—they form a true apperception mass. Arithmetic cannot be discarded when algebra is taken up. When the student crosses the pons astnorum, he cannot burn it, or leave it behind him—it's a pontoon bridge, and he must carry it to the end of the march.

Again, all observation worthy of the name requires an exercise of judgment. Of the many facts perceived, only those must be noted that can be utilized. The demonstration of a proposition in mathematics, or the solution of a problem, always involves more or less of this discriminating observation. A few months ago two Denver teachers were prompted, by the same facts, to make a study of circulating decimals. One sought to demonstrate the principles on which certain seemingly curious facts depend; the other wished to utilize repetends in the preparation of convenient problems for mechanical drill. Both discovered, each for himself, certain things not noted in ordinary text-books; but facts that were seized with eagerness by one, were utterly ignored by the other. The first produced demonstrations in which abstruse algebraic theorems were required; the other constructed a table of four hundred numbers that furnished eighteen thousand graded problems in multiplication with their answers, besides a few million problems in addition and division. Both became interested in the same facts, and in the earlier stages of their work both became cognizant of the same new facts, but each selected those that bore upon his chosen problem and thus reached his goal.

Again, it is obvious that in mathematics the instructor may know more accurately the apperception mass of each student than in aimost any other study. It is also evident that the members of the class will differ less, one from another, in the matter of acquiring ideas than in other branches.

Still further, in mathematics the mind is never prejudiced by previously acquired ideas against the reception of a new mathematical fact. But a fossilized theology has in past times often interfered with the study of other fossils. Political prejudices may paralyze our apperception mass when an unwelcome economic idea is presented. For example, we all know that the production of gold is largely from placers and depends to a great extent upon accidental circumstances, while that of silver involves deep mining and depends more upon the state of mechanical skill. We know also that the production of the yellow metal has been far more variable, as we should expect it to be. We further know that while, through legislative interferences with supply and demand, they practically fluctuated together, the yellow metal always took the lead both in rising and falling; and since their divorce, has risen far more than silver has fallen. From all this it follows that the white metal is more stable in value. But if your apperception mass is antagonistic to this conclusion, and I had to be hanged or convince you of its validity, I should order my ascension robe.

DISCUSSION OF HERBARTIAN PRINCIPLES FOR SECONDARY SCHOOLS.

Reported by PROFESSOR J. N. WILKINSON, Emporia (Kan.) State Normal.

The meeting of the Herbart club at Chattanooga introduced for the first time in America the application of the principles of Herbart to secondary schools. The paper printed to introduce the discussion on that subject was a translation of a portion of a report made by Dr. Frick, of Halle, and Dr. Friedel, of Stendal. This discussion is very interesting as raising the question whether the same notions as to concentration and interest should guide in the secondary schools, as have been urged heretofore by Herbart's disciples in this country, for the elementary schools.

The following items from the summary of the translation contain the points most frequently referred to by the speakers in the discussion:

"Herbart's theory of the nature of the soul as of a perfectly simple monad is rejected by the reviewers.

"Knowledge exercises, indeed, a strong influence upon the will, but it should not be regarded as the essential source of the will.

"Not knowledge, but interest, is the purpose and aim of all instruc-

"The materials offered for concentration in the common school are rejected for the secondary schools. But 'very weighty and valuable thoughts for our secondary schools are involved in the proposator of such important material of concentration from the epochs and turning-points of historical development."

Dr. J. E Russell, President Teachers' College, Columbia University, New York:

"If the Herbartian pedagogy has anything of value for the high school men of this country, it is most unfortunate that their attention should be attracted to it in this form. It may be wise to ask us to bow down to some things German, but not to all things German This monograph was written at a time when Dr. Frick and others were discussing the bearings of Herbart on the problems of education as a whole. A large part of the review under discussion is devoted to things which should be passed over entirely in America. Herbari's theory of the soul should be passed over without discussion as to what psychology should be the basis of this pedagogy. If we are to look for any help in the field of secondary instruction, we must believe that whatever is true in primary instruction will be true in secondary instruction. I wish to confine my remarks to what is true in the secondary grades. I wish to point out the chief defect of this peda gogy as applied to the pupils of our schools. It takes no account of the forming of the will by other forces than school instruction. The child does not receive all his education in the schoolroom. The schoolroom training is a comparatively small part of his education although it happens to be a very important part. To the child who does not come into the school until he is five or six years of age, and who then remains in school less than forty weeks a year, even though it be six years or forty years, the school cannot come as an all-controlling force, for its instruction does not include the whole ground of his education. There is an education that comes from without the school. We only need to give our attention to primitive forms of education to see that a whole people can bring themselves to a high position and maintain themselves there with nothing comparable to school instruction. The instruction given by the school is not suffi cient to form will and character. That instruction must be connected with something else.

"I do not choose to discuss the sources of education so much as the question; 'What shall be its purposes? Shall it be an allegement

Bildung, a general culture, or shall it be a special training?' We are told that there is an advantage in specialization. If we grant that it is better to do one thing well than many poorly, I ask, 'How are we to do even one thing unless the individual doer have an interest in something beyond himself?' That is the old question of individualism carried to the extreme. Shall we educate the individual for himself alone, or shall we consider the social order also? Shall we look somewhat beyond the individual to the good of the whole? We may say, theoretically, that each individual is to be given the best opportunity to develop to the fullest extent all his powers. But if we are to accept the doctrine of Herbart, that many-sided interest is to control the motives, it will preclude the extreme of individualistic notion. The high school is dominated by the idea of college preparation, and the ability to gain strength that enables pupils to pass an examination is one of the chief ideals that we hold before ourselves. This notion has given us something else in place of the incentive of interest. We are to look to the individual, we are to look to the social order. If the child is to be considered most, we need not insist that the teacher shall use every means possible to develop all the pupil's powers until he has the world-view, and then we may begin to specialize. That notion of specialization is now creeping into our high schools through the theory that the high-school pupils should be allowed to choose their own course of study. The child is allowed to choose with the imperfect view that the pupil must necessarily have. To permit such an immature person as this to make choices for himself is to carry the idea of specialization to the extreme, and is to give us a product far less desirable than would be the all-round man, or the man of many-sided interest. As for myself, it seems that all the way up, even into the college course as distinguished from the university, the idea shall be the allround training of the individual with a view to rounding up this worldview for the student before we allow him to take up the electives.

"Now, if instruction in the schoolroom is not all-sufficient, if there is a great deal of education that does not come directly from the teacher, we can safely trust the pupil of the high school to fill out a great many lines during several years, not with the view of getting all there is in any one department, or of understanding a specialty from the scientific stand-point of the college professor. We can trust his future experience to systematize and organize; the instruction in our high schools need not be conducted in what we are pleased to call a strictly

scientific spirit, but in a spirit largely guided by this world-view that has been explained. Whether the school be a preparation for college or for life, the idea underlying the work should not be the exclusive and scientific view, not the narrow view which will look at history. geography, and other such studies as something standing each by itself, but a view which will bring one to bear on the other, even though the systematic development of any one subject should not be followed out in a thoroughly scientific manner. If we are to develop the all round man, it is necessary to bring the subjects of the course into such relations, one with the other. As Dr. Frick thought this the most important thing for the German teachers to do in the prepara tion of courses for the gymnasia, so I think the most important thing for American teachers to do is to arrange so that each study shall contribute to the building up of the many-sided interest. They should not seek first of all to teach according to the views of some college professor, but to teach so that the energy shall be concentrated upon the building up of the mass of apperceptive material for future additions by the pupils. If we had been asked to discuss the last two or three chapters of DeGarmo's Herbart and Herbartians we should have had something more definite than this report to guide us. If we had been asked to study Dr. Frick's programme, which can today be found in operation in German gymnasia, we should have had a more definite work. The study of the suggested correlation of the classics as given in this report is by no means the best work we might have had from Dr. Frick."

Dr. Charles DeGarmo, President of Swarthmore College, Pennsylvania:

"I will add just one word in the way of reason for the position taken by the paper and Dr. Russell. On our journey to this city we may have been impressed by the idea that the old primitive rural conditions still prevail. It looks as if we had the old primitive idea of the individual, the man who took his gun and his family into the woods to hew out a living in the forest, having an individualism that need not pay any attention to his neighbors. That individualism was the product of a civilization that no longer exists. The motive power in those days was muscle, either of man or of beast. As Dr. Strong puts it, every set of muscles brings with it a mouth, and the feeding of that mouth was almost the entire concern. Now, one set of muscles can, with the help of machinery, feed many mouths. By increasing

the power of machinery one man can feed an increased number of mouths. Our civilization has undergone a radical transformation. City population has risen from 3 per cent. of the entire population a century ago to 30 per cent. at the present time, and the per cent. of urban population, even with vastly increased total population, is still to go on increasing. The country boy must go to the city to get his living, for machinery has taken his place on the farm. We must develop an individualism, but we must develop it with a new basis, the basis of an urban life. The only way to bring him in touch with the world as it is, is to give him this many-sided interest. In the college at Swarthmore we divide our subjects into three classes: First, the elementary subjects, such as English, literature, and history; second, the scientific subjects, such as chemistry, biology, and physics; third, economic subjects, which show individuals in operation together, in cooperation. Even they who specialize in one of these departments should get the idea of the world-view, and the place to get the roots of this idea is the high school. I have no sympathy with the Harvard idea, which allows the pupil to narrow his course by free electives in the high school or even in the grammar school."

Professor L. H. Galbreath, School of Pedagogy, University of Buffalo, New York:

"I am slightly confused by the paper and its discussion. In the first place, this paper states that pedagogy is based upon psychology and ethics. I doubt that. It is not true as a matter of fact, it is not true as a matter of theory. If we can overthrow so easily the basis of psychology and ethics, I want to ask what we have on which to base as a superstructure a system of pedagogy. What kind of ethics? What kind of psychology? Does it make any difference whether it is a new psychology? We have apparently all agreed that interest is to be the aim. I am confused as to how we should interpret the word interest. We have looked upon interest in two ways: First, as a guide in the selection of subjects; second, as an incentive, the thing which gives the 'go' to work. Interest is to guide us in the treatment of subjects, and we are also talking of the interest of the child as a guide to him in his own work. On the one hand we study psychology, ethics, and almost everything else, to gain the goal of education to which we want to lead the child through instruction. Now, on the other hand, it seems to me we face about in using interest as what is to guide the child."

Dr. Charles McMurry, State Normal University, Normal, Illinois "Dr. Russell's objection to the thesis under discussion is not well founded. The style of Dr. Frick is difficult and involved, and one to which we are not accustomed, and we may fail to appreciate him on that account. Dr. Frick criticises Herbart on some points. Herbarts theory that the soul is a simple monad is rejected by these reviewers. The other point of criticism, namely, the will, is also a matter of ds pute with us in this club, as we have discussed Herbart; those are the two points to which we have the greatest objection in this country. There is in this translation just the briefest sort of a reference to the method of approach to the question of the will. This is the objection that Dr. Harris has so frequently set up for us to think about, and in making us think about it he has done the Herbartians great service.

"The third proposition is, that not knowledge but interest is the purpose and aim of all instruction. Now, I am glad to have an opportunity to refute a proposition that was made by Dr. Russell, to the effect that the Herbartian school sets up instruction as all-sufficient. This is true neither here nor elsewhere. Anyone who has studied DeGarmo's Herbart and Herbartians and Felkin's Introduction to Herbart knows that there are three things which the Herbartian emphasizes, namely, instruction, discipline, and government. Instruction is to draw in all the experience which the child has received or can receive, including the first six years of life. The doc trine of apperception is based on that notion, and the objection to the doctrine of apperception is of the same character as is the objection of Dr. Russell, that we cannot control all instruction. I want to call attention to the fact that besides instruction and apperception we emphasize discipline. No Herbartian pretends to say that any one of the three aims I have mentioned answers all purposes, or is the complete thing by itself. As to discipline and training, which seem to be ignored by the first speaker I want to challenge his position, because it is a misconception and is a misstatement of the view of the Herbartian school to which we will not submit for a moment. There are other means of character development besides instruction, which we all agree in emphasizing. We are able to meet successfully the objection made by Dr. Russell when he asks what we are to do with a child six years of age when he comes with a large previous experience What does apperception mean if not that the child's instruction must root itself right back in the child's experience? Education is the

unification of the child's whole experience, and the school is the only institution that has any systematic means of organizing the child's previous knowledge and experience, including that which precedes the school. I think probably Herbart did over-emphasize instruction, and that he over-estimates the possibility of organizing all instruction, but I am sure that the duty of organizing in the school all of the child's previous experience is imperative.

"Just one other reply. I am a little surprised at Mr. Russell's proposition that we do not care what the teachers have done in another country. Dr. Frick has been struggling at Halle with these problems, and this study has been gradually taken up by the teachers of Germany, until now, after a growth of twenty years, they have worked out for themselves some conclusions, while we have scarcely raised in this country the questions with which they began. Dr. Russell speaks of studies that have no relation to us. I cannot see why we ignore a first-class schoolmaster because he is a German. We should not refuse to study his work any more than we should decline to study the government of Russia. It is worth while to know about it, even if we do not adopt it. As to the point of Herbart's pedagogy being based upon psychology and ethics, I fully agree with Mr. Tompkins. The question raised by these reviewers is, 'How far has Herbart in his pedagogy touched upon principles that are recognized by every scientifically based psychology?' Mr. Galbreath sets up a false standard in rejecting psychology and ethics as a basis for pedagogy.

Dr. Harris, National Commissioner of Education, Washington:

"I would first call attention to the words concentration and correlation. Both words are used in the paper. My chief objection to making that division the important thing in the course of study is my suspicion that there is not a good psychology or ontology underlying Herbartianism, not because I do not believe in concentration or correlation in the proper sense, namely, in the world-view. If one reads the report of the Committee of Fifteen he will be forced to come to the conclusion that each one of these branches has a relation to the Weltanschauung. That is the fundamental principle of interest which connects all parts of the course of study. I am glad that our friends are pushing the Herbartian pedagogy, but when they reject Herbart's philosophy they do not put anything in its place, and therefore do not have the world-view with which to connect all the parts of the course of study, hence they omit the fundamental principle of interest.

We cannot properly say that any other philosophy will do just as wed for the basis of Herbartian pedagogy.

"With regard to the secondary schools, neither the translation nor the editors have defined the elements of secondary education. In the gymnasium is some elementary work, some secondary, and some higher. The elementary takes up things in a fragmentary manner. The elementary schools cannot, therefore, give a world-view."

C. A. McMurry:

"There was a thought presented by Dr. Harris in the discussion of Professor Tompkins' paper to the effect that the Weltanschauung is identified with the highest form of interest. Now, that is all right for the maturely educated person, but the great problem of education is to see that by some means the child is supplied with the Weltanschauung The little child does not have it, and he cannot get it. Our problem is 'What shall we do with the children who do not possess it?' The child at the age of six has no life-purpose, unless it is to make mischief and have a good time. How shall he be set to work after driving him through a discipline in school that antagonizes him with the school? How, little by little, to set up the little daily life-purposes of the child? The philosopher avoids this difficulty by setting up a mature Weltanschauung. Make knowledge not simply a dull drill, not a disagreeable thing, but a spiritual development, and you have solved the problem by developing gradually a Weltanschauung."

In the discussion of interest as related to the world-view (Wellanschauung) a marked constrast is apparent between Herbart and Dr. Harris. "The world-view," says Dr. Harris, "cannot be given by the elementary school." It is the ripe fruit of the mature life of the thinker. Again he says: "The relation of each branch of study to the Weltanschauung is the fundamental principle of interest which connects all parts of the course of study." Herbart's view of interest, on the other hand, is that of a pervasive principle that invigorates every hour of study in childhood. Its chief value is in giving healthy tone and vigor to children's studies as they grow toward maturity. With Herbart the interest is the very spirit and test of the educative process. It is difficult to see that Dr. Harris has much use for interest until long after the educative process of childhood is over and the thinker in mature life has occasion to take a broad view of studies. Herbart has in mind the child in the process of growth, Dr. Harris the adult .-Note by the Editor.

Dr. W. T. Harris:

"The services of the Herbartian society have been very great in awakening thought, but some of Herbart's teachings must be rejected. I notice that Herbart in his philosophy denies the will, and makes it a part of feeling. On the other hand, there are places in which he dwells on the cultivation of the will. How can be cultivate it? How can be have morals? I have a crucial question to ask of any Herbartian Do you believe that the human ego can inhibit the chain of causation in which it finds itself ! Can it modify the chain of causation and originate new lines of causation? It seems to me that the German writers of the Herbartian school have no conception of the nature of morals. If I cannot modify my chain of causation I am not responsible for it, and am not a moral being. I certainly can modify it, and I can inhibit it altogether. I can decline to continue the chain of causation, and I can persist in this even until I suffer mar tyrdoni as a consequence. These writers try to avoid that point and to escape the necessity of inferring the transcendental will. They do not believe in the transcendental will. The transcendental will can originate a causal series, and they cannot account for it in their philosophy.

"There could be no real action without an idea I would not eat support if I did not want to do it. The will controls in all these matters. It turns these ideas into reals and makes a new chain of causality. This is the second free act of the will. Its first act makes the ideal or motive; its second realizes the ideal or motive. When it acts from motives it is, therefore, doubly free."

C A McMurry

"I felt sure that Dr. Harris, because of his body of apperceiving ideas, would attack the point relating to will. Now, the ground on which the authors of the theses based their adoption of his pedagogy is what they found in Herbart that can be found in almost any modern system of philosophy. That they have most fully adopted Herbart's view, as far as they have adopted any, is proven by the later theses of the Supplement.

"As to the question often raised by Dr Harris concerning the possibility of a person's undertaking some good work in the face of danger that may lead even to martyrdom, a reformer will not do that unless be has ideas in his head. He does not act blindly. He suffers martyrdom because he has an ideal. These ideals which influence the will are the products of careful education.

"In the course outlined by Dr Frick we find the standard Latin and Greek classics. Can it be said that our secondary schools are not concerned about these?

[Herbart not only did not believe in the transcendental will, but he protested against this notion with the whole weight of his mind. Herbart's protest against Kant's idea of the transcendental freedom of the will is the starting point in his system of pedagogy. This is not weak point first discovered by Dr. Harris, but was consciously set up by Herbart himself as the corner stone of his system of education. His argament, briefly stated, is as follows: education is impossible on the basis of the transcendental freedom of the will. Such a transcendental free will is beyond the reach of educative influences. It cannot be in any way touched or molded by educative influences. How is it possible to make any impression upon a child or get any sort of inoral leverage if all impressions, all ideas, all experience, all habits are less than dust in the balance compared with this free will? What can parents do, what can the teachers do, when all their efforts he beneath the contempt of this transcendental will?

Speaking of the free will above, Dr. Harris says. "Its first act makes the ideal or motive." The word make has evidently, in this passage, a peculiar meaning. From Herbart's standpoint it is fair to say that experience and education make the ideals, that the intellect and the feelings play a part coordinate with the will in determining the circle of thought upon which the exercise of will power is based. Note by the Editor.]

Dr. Frank McMurry, Principal of School of Pedagogy, University of Buffalo

"In summing up, we may say that on the whole we have granted that interest is the aim of the high school, second, that interest should be many sided, and that it should be morally educative. Dr Russell suggests that the work in the high school be less elective, and the matter of the course be specially correlated.

"There seems to be some difference among at least three of the speakers in relation to the aims of instruction. Herbart, regording the soul as he did, looked chiefly to instruction. He viewed pedagogy as an architectural system. According to Herbart's psychology, that is the light in which instruction is seen, but objections to that jsy chology appear in the article under discussion. The Froebelian view is better, and this, back of the Herbartian pedagogy, makes the child

a greater factor. The difference lies in the fact that we have, according to broebel, a larger native force in the child than according to Herbart Still, there might be an objection to the Froebelian view, because of the ignoring of the personality of the teacher.

"The theses quoted omit hygiene and other things for lack of time.

"We understand Dr Harris to say that conception of life guides observation. Dr. Charles McMurry expresses a desire to correct the child's conception of life from time to time in order that the latter observation may be more nearly correct.

"We have stated that the aim should be interest. The last discussion shows that we should have an ethical aim. The remark is made that we overthrow Herbart's ethics and psychology. Again, the inquiry is made, 'Shall we adopt any other ethics and psychology?" The translation says that any ethics that recognizes moral law will serve as a basis. It is also there urged that the will must be regarded as capable of education. The question is raised whether Herbart's pedagogy must be regarded as based on all the parts of his psychology, and as to whether Herbart's pedagogy can stand on one system of psychology as well as on another. It must be remembered that several different systems of psychology stand for apperception, and several systems for induction and for other educational ideas, and it is on these few large points in psychology that pedagogy rests.

"As to the question of transcendental will, that was one of the first considered by Herbart. How can we teachers ever get at the transcendental will? We are afraid to give a nickel novel to a child test he yield to its influence. If the will is independent, how can there be any danger? If independent, how can we influence it or educate it? So there are two sides to this question."



THE NATIONAL HERBART SOCIETY.

- r Purpose and Plan of the society.
- 2. Conditions for membership. Local clubs.
- 3. List of Yearbooks and Supplements published
- 4. A carefully planned course of study in the pedagogy of Herbart, with definite references to leading books by chapter and page.
- List of books referred to in the course of study, with publishers and price.

PLAN AND PURPOSE.

The National Herbart Society was established for the purpose of securing a scientific study and discussion of leading problems in public education. It has thus far published three Yearbooks with their Supplements, and has contributed largely to deepen the knowledge and interest of teachers in important questions.

It is the purpose of this society to secure the ablest treatment of these topics in the Yearbooks, and a free and full discussion of them from every important standpoint. A Yearbook is published and distributed to the members in June of each year, about a month before the meeting of the National Educational Association. A Supplement is also published and sent to the members before the meeting of the Department of Superintendence in February of each year.

CONDITIONS FOR MEMBERSHIP.

The society desires the regular membership of all teachers and others who are interested in the questions discussed. Membership costs one dollar per year for each person, and entitles the member to one Yearbook and Supplement. Previous Yearbooks and Supplements may be had at the same rate.

LOCAL CLUBS.

Many local Herbart Clubs have been formed throughout the United States for the study and discussion of the Yearbooks and Supplements.

Where a local club of four or more persons is organized the fee for each person is 75 cents per year. In such cases the organizer of the club will remit the fees to the Secretary and receive the Yearbooks for

distribution. Such a club usually holds regular meetings for the decussion of the Yearbooks or other literature recommended by the society. Those desiring membership singly or in clubs should address

CHARLES A. MCMURRY,
The University of Chicago,
Chicago, Illmois

PUBLICATIONS

Four Yearbooks and their Supplements have been published by insociety as follows

First Yearbook for 1895 -

- " Pressing Problems, C. DeGarmo.
- "Concentration," F McMurry.
- "Culture Epochs," C. C. VanLiew.
- "Course of Study in Primary Grades,' Mrs. Lida B. McMurry

First Supplement for 1805 -

Discussion of the above topics.

Second Supplement for 1895

"Interest as related to Will," John Dewey.

Second Yearbook for 1806

- "Isolation and Unification, ' E. E. White.
- "The Culture-Epochs," Lukens, Seeley, Brown, Dewey, Galbreath Hinsdale, Felmley, and VanLiew
- "Literature in the High School," J. Rose Colby

Supplement for 1896

"Training for Citizenship," J. W. Jenks.

Third Yearbook for 1897

"Moral Education," John Dewey, Charles DeGarmo, Wm. f. Hamsand John Adams,

Supplement for 1807 -

"Training for Citieznship," E. J. James, C. C. Van Liew, J. W. Jenks, Frank McMurry, Louis Galbreath, H. M. Slauson, O. F. Bright, Frank Dixon.

Second Supplement for 1897 -

- "Observation and Apperception," Arnold Tompkins.
- "The Application of the Principles of Herbart to Secondary Schools, Dr. Frick and Dr. Friedel,

Fourth Yearbook.

The whole series of Yearbooks and Supplements for the first four years will be sent to any address for \$3.00.

A COURSE OF STUDY IN THE PEDAGOGY OF HERBART.

The following carefully planned Course of Study in Herbart's Pedagogy is designed for those teachers who wish to make a regular study of this subject. It contains in a natural and systematic order the outline of the chief doctrines of this school with definite references by chapter and page to the leading books in English.

- 1 The Biography of Herbart Chapter II of DeGarmo's Herbart and the Herbartians. Felkin's Science of Education (Herbart). Introduction by the Translators, pp. 1-23.
- Most writers on Herbart, both in Germany and in this country, divide the
 work into three parts: (1) The psychology of Herbart. (2) His ethics.
 (3) His pedagogy. The reason for this is the distinct purpose in
 Herbart to give pedagogy a scientific form by basing it upon psychology
 and ethics.
- 3 The Psychology of Herbart. A full and clear exposition of this topic is found in Felkin's Chapter I of his Introduction to the Science and Practice of Education, pp. 1-53. See also Chapter III of DeGarmo's Herbart and the Herbartians, pp. 23-46. Also Ufer's Part I, of the Pedagogy of Herbart, pp. 1-33.
- 4 The Ethics of Herbart. Felkin's Introduction Chapter 11, pp 54-79 De Garmo's Herbart and the Herbartians, Chapter IV, pp. 47-56 Ufer's Pedagogy of Herbart, Part II, pp. 34-53.
- 5. The Aim of Education and Educative Instruction. Science of Education (Herbart). Translated by Felkin, pp. 78-121. Introduction to Herbart, Felkin, Chapter III, pp. 80-90. Third Yearbook. Moral Education, by John Dewey, Charles DeGarmo, Wm. T. Harris, and John Adams.
- 6. The Doctrine of Interest. Introduction to Herbart by Felkin, Chapter III, pp. 90-103. The Science of Education by Herbart, Second Book, pp. 122-199. Herbart and the Herbartians, DeGarmo, Chapter V, pp. 57-67. Interest as Related to Will, Second Supplement to First Yearbook, John Dewey.
- 7 The Doctrine of Apperception. Lange's Apperception, translated by the Herbart Club. DeGarmo's Herbart and the Herbartians, Chapter VII. pp. 166-179.
- 8. Correlation. Herbart and the Herbartians, Chapter IV, pp. 113-129, Chapter IV, p. 240. First Yearbook, Concentration, Frank McMurry Second Yearbook, E. E. White, with reply to the same.
- 9. The Culture-Epoch's Theory. Introduction to Herbart. Felkin, Chapter

III, pp. 121-145. First Yearbook, C. C. Van Liew. Second Yearbook Herbart and the Herbartians, DeGarmo, Chapter III, pp. 107-112 Lange's Apperception, pp. 110-127.

- to. The Method of Instruction. The Formal Steps. Herbart and the Herbartians, Chapter V. pp. 130-140. Uter's Pedagogy of Herbart, 481-91. Introduction to Herbart, Felkin, Chapter III, pp. 105-120. The Essentials of Method, DeGarnio
- 11. Government and Discipline Moral Character. Introduction to Herbart, Felkin, Chapter IV, pp. 155-175. The Science of Education by Herbart, (Felkin). Third Book, pp. 200-268.
- Distinguish between the two books, (1) Introduction to the Science and Practice of Education, and (2) The Science of Education. The former is a much simpler and easier introduction to Herbart. The latter is a translation of Herbart. Both-books are by Mr. and Mrs. Felkin.

LIST OF BOOKS ABOVE REFERRED TO.

- Introduction to the Science and Practice of Education, by Herbart By Henry M. and Emmie Felkin Published by D. C. Heath & Co. Price \$1.00.
 - 2. Herbart and the Herbartians, by DeGarmo. Scribners. Price \$1.00.
- 3. Science of Education, by Herbart Translated by Felkin D (Heath, Price, \$1.00.
 - 4 Lange's Apperception, D. C. Heath, Price, \$1.00.
 - 5 Ufer's Pedagogy of Herbart (Zinser), D. C. Heath. Price, 60 cents
 - 6. The Yearbooks of the National Herbart Society.

NOTICE. 4

We desire as many as possible regular members continuing from year to year to whom the publications of the society will be regularly sent without further notification. Those desiring such membership should notify the Secretary.

CHARLES A. McMURRY,
The University of Chicago,
Chicago, Illinois.



SUPPLEMENT

TO THE

FOURTH YEARBOOK

OF THE

NATIONAL HERBART SOCIETY

FOR 1898

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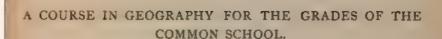
A COURSE OF STUDY IN GEOGRAPHY FOR THE GRADES OF THE COMMON SCHOOL

BY C. A. MCMURRY



PUBLISHED BY THE SOCIETY 1899

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THESES.

The chief ideas discussed and illustrated in this paper may be briefly stated in the following propositions:

- t. Geography is a study of the earth as the home of man. Each important subject treated should contain a central idea illustrating this point.
- 2. The general movement is from the home outward to the home state, to the United States and North America, to Europe, Africa, Asia, Australia, and South America.
- The home geography by means of excursions and very definite discussions should be made the substantial basis for the later treatment of many topics.
- 4. A few important topics for each grade should be carefully selected and elaborately treated.
- 5. The central topics for discussions throughout the grades should be types. Other more general exercises are necessary to supplement the type-studies.
- 6. In the elaborate treatment of any type-study, its causal relations to other things in geography, natural science, and history, that is, to its whole environment, should be carefully worked out.
- 7. The constant review and elaboration of previous lessons should be brought about by a detailed comparison of each new topic studied with all similar topics studied in previous grades.
- 8. Such series of similar and connected topics, extending throughout the course of instruction, will build up and organize the chief representative phases of geographical thought.
- "Geography is the study of the earth as the home of man." This definition gives the key to geographical study, as distinguished from other studies and as related to them. The study of the earth alone, its phenomena and forces, its vegetation and animals, its rocks and atmosphere, is natural science pure and simple. The study of man in his work and progress, in his struggles and representative deeds, is history. The study of the earth as related to man is geography.

Every topic in geography has a double footing in natural science and history. It has two faces - one toward nature and one toward man. This double or complex character is the distinguishing traff of a strictly geographical topic. The moment a topic becomes purely scientific or purely historical it loses its geographical character Geography is the connecting bridge between the two great real studies. nature and man. A description of the Illinois or Hudson River, for example, is the presentation of a great complex object in nature as related to the industries, travel, homes, and cities of men. The treat ment of the city of Duluth as a natural trade center includes not ont the railroads and shipping that center there (man's work), but also the surface, climate, and natural resources of the Northwest and the senes of lakes and rivers which connect this productive region with the eastern states and the Atlantic Ocean. The study of Mt. Washington and the White Mountains as a tourists' resort would involve a multitude of nature's works in tree, bird, stone, and brook, and the villages, roads, traditions, mountain engineering, summit house, and other works of man's brain and hand.

"In approaching the field of geography with children, we find ourselves face to face with such a variety and countless multitude of facts that we must at once resort to some principle of selection. Out of this vast conglomerate and miscellaneous mass of facts and phenomena we must select a few. Some facts are secondary or trivial; others are central and wide-reaching in their influence. Some facts are isolated and exceptional; others are typical and illustrative of laws and principles. After deciding what the proper realm of geography is, it is our next duty to select these important type-subjects, a full understanding of which will be equivalent to a mastery of the strategic points in a widespread country. If we can take full possession of a line of these commanding fortresses, we shall be able to hold and subdue the whole country at our leisure.

"Moreover, with children, these type-studies must be capable of graphic, picturesque treatment. They should be rich in instructive and interesting particulars, not abstract, formal, and barren. Our type-studies, therefore, must combine two great merits: they must involve representative ideas of wide-reaching meaning in geography, and they must, at the same time, be concrete, attractive, and realistic.

"I shall first inquire whether there are important geographical topics which should be treated from the strictly geographical standpoint and

not from the standpoint of any other study, such as botany or history. Many books and teachers do not discriminate closely between geographical topics and those which are strictly scientific (geological, zoölogical, astronomical, etc.). A topic in geography proper is never strictly identical with one in natural science, however they may overlap. In fact, it never centers in the same unit of thought. A geographical topic is, generally, a geographical unit, which involves incidentally a variety of facts from natural science and history. Pikes Peak and vicinity, as a resort, are a mountain neighborhood with a variety of scenic attractions, all centering and culminating in the giant peak. A description of this mountain resort involves such topics as Manitou and its mineral springs, Chevenne Cañon, the Garden of the Gods, the Cave of Winds, the foot-trail up to the peak, the railroad to the top, the timber line and rock-strewn summit, the views of distant mountains and plains, the signal station—in short, works both of nature and of man's ingenuity. A great variety of scientific and historic topics is suggested by such a description, as, for example, the explanation of mineral springs, of air pressure at the base and summit, of the granite bowlders and their origin, of the formation of the cañons, valleys, etc., by erosion, of the vegetation at the different levels, of the first exploration of the peak, of the engineering difficulties of roadbuilding. Any one of these topics, and several others, might suggest detailed scientific or historical treatment, but the geographical standpoint does not call for a detailed study of any of these topics. We may get a clear, definite, and interesting account of Pikes Peak and vicinity without a technical treatment of any of these topics. But Pikes Peak, as a typical mountain resort and center, is important enough to call for a full descriptive geographical treatment. It will never receive this treatment in any one or in all of the natural sciences, or in history. The standpoint in each science is different, and the geographical unit is never reached. The geographical unit and its treatment would naturally come first in order of studies, because it is a prominent, easily grasped whole. The adequate treatment of the suggested science topics, as wholes, comes later and will naturally fall to the separate sciences.

"The topics which can be treated from a strictly geographical standpoint are large, complex units, each of which involves a variety of scientific and historical facts. Their unity is found, not in any one of the sciences, but in the geographical type which this object illustrates. The Hudson River, for example, the full treatment of which also involves a multitude of scientific, historical, commercial, and scenic constituents, is a geographical unit which typifies in its main points the character of many rivers. The description of the important topics in this subject can be made very instructive and interesting without any effort to explain and work out in detail and separately the scientific problems which are suggested by the detailed treatment; for example, the geologic formations along its shores, Hudson's first voyage up the river, the connection with Lake Ontario in the glacial period, the effect of stripping away the forests, the native plants and animals of the Adirondack region. These latter subjects may be very interesting for science or history lessons, but they cannot be adequately treated in the geography. The purpose of geography is not to ignore them, but to suggest them, and to show how intimate is the relation between them and geography.

"To further illustrate the distinctiveness and importance of geographical types, take the treatment of a coal mine as a geographical topic. We may have an extremely interesting and instructive description of the sinking of the shaft, of the ventilation of the mine, of blasting out and hoisting coal, of the dangers from caving in and from explosions, of the transportation by river and railroad, and of the uses of coal in commerce, manufactures, and for heating purposes. We may have such a geographical treatment of a coal mine as this, without any satisfactory discussion of the strictly scientific questions which are sure to be suggested by this study; for example, the origin of coal beds, the explosion of gases, the steam engine, the principle of the safety lamp, the oxygen in the air, the first discovery and use of coal, etc. We may well afford to treat these science topics in parallel iessons in natural science, but it would utterly swamp the geography lesson to branch out into anything like a scientific treatment of these topics. On the other hand, the coal mine is a legitimate geographical topic which deserves to be handled in this study, because it can never be so handled in any other school study. It has a central, controlling idea, which brings into relation and unity a large complex of facts. It is a type of one of man's chief occupations in subduing the world, and it is closely and vitally related to commerce, structure of the earth, and human welfare generally.

"In order to secure and establish the independent right of geography in the sisterhood of studies, it is necessary to make out a series of

important type-subjects, in each one of which a characteristic central thought is so distinctly geographical that no other standpoint of natural science or history is able to dislodge the teacher from his geographical stronghold. Now, this is exactly what is claimed for the leading series of type-studies in geography. Each one of them centers in a geographical idea that is a natural stronghold. It is the focus for a variety of objects and facts which find in it as a center their coherency and unity. The Rhine River is such a geographical unit. A California gold mine is another. The Andes Mountains, Minneapolis, Lake Superior, are others. If we can maintain the right of this series of geographical centers to a distinct place among studies, we shall be able to hold the geographical field against all attacks, even against those who would obliterate the boundaries between geography and natural science." (Educational Review, May, 1895.)

As to questions of method in the treatment of topics, there are two points of especial significance. First is the study of any given topic in the full detail of its relations to other topics in geography, history, and science. This is primarily a study of direct causal and necessary relations.

In the study of Buffalo in its trade connections with the lakes and the lake states, with the lake ports on the one hand, and with New York city, by means of canal and railroads, on the other, we have a series of causal relations whose examination gives full meaning to the study of this city. Its existence is also dependent upon Niagara Falls, which obstruct navigation completely, and therefore make a transfer of goods to canals and railroads necessary at the end of Lake Eric. Every important geographical topic which is studied in its causal relations is thus clearly explained in its genesis and importance. Thus to understand Pittsburg as a manufacturing and trade center, it is necessary to consider its advantageous position for collecting raw products in iron, coal, lumber, petroleum, etc., its commercial advantage for shipping upon rivers and railroads, its historical importance in the development of the Ohio valley, its manufacturing advantages; and in these things is found the whole significance of this city as a center of population.

Likewise in the study of any important agricultural interest, like wheat-raising or corn production, advantages of soil, of climate, of access to trade routes, and commercial cities, as clearly revealed, bring out the economic value of these producing districts and exhibit their relations to commerce and to distant cities and populations.

There is no important topic in geography which deserves a tell treatment that is not found to possess these deep-lying causal relations which reach out across continents and oceans and give opportunity to thoughtful reasoning, and survey such as lead up gradually to munderstanding of great geographical forces.

In the second place, every such topic, when properly selected and studied in its comparison with other similar topics in geography, is found to be a type or representative of a great many similar cites, rivers, manufacturing industries, or surface features, etc., which form the basis of their classification. Geography, as a science, is based upon these classifications together with the general relations which prevail in the physical world. Pittsburg, for example, is a good type of commercial and manufacturing cities at the head of steambout navigation on large rivers.

New York city is the most conspicuous type of great commercial centers on the seacoast, drawing many products from foreign countries across the ocean, and, on the other side, drawing from a whole contnent its staple productions for foreign export. A careful study of New York, as the chief center for exports and imports in the United States, will furnish the best standard for interpreting all the other seaport cities of America, and, in fact, of the world.

In the same way a careful study of Lake Superior, or any one of the great lakes, in its natural setting, in its tributary rivers, in its commercial cities, and shipping, in its hydrographic basin, in its scenery and storms, sets forth a type or representative of all of the great lakes, and, in fact, of the other great lakes and inland seas of the world.

The Mississippi River, with all its tributary valleys, is another such large and comprehensive type of great river valleys for other continents as well as our own. It deserves study, first, for its own importance and variety of interesting topics, and, second, because it is typical of all of the great agricultural basins the world over which are found to be the homes of large populations.

Every important topic in geography should be worked out quite fully in its causal relations and inake-up, and then, by means of comparisons with other similar objects of the same class, its typical significance is shown.

In the fourth and fifth grades a series of topics such as we have described may be so outlined as to bring into successive view all of the chief geographical ideas of North America.

If the fourth grade has been devoted to the geography of the Mississippi valley, the fifth grade would then take up the topics selected from the eastern or Atlantic states, from the western or Pacific states, from British America, Mexico, and the West India islands. It is quite possible to select twenty-five picturesque representative topics for the fifth-grade work, each of which can be treated in full detail and afterward connected by comparison with the class to which it belongs, and give a tolerably complete, yet penetrating, knowledge of the geographical material of North America suitable for children.

At the end of this first three years of work—the third, fourth, and fifth grades—the children will have had an opportunity to study all the leading geographical topics as they are illustrated in the United States and North America, our home continent. This will furnish a most substantial basis for the study of foreign continents with their rich material of geographical instruction. The underlying principle which lays so much stress at first upon the study of the home and of the home countries is found in the interpretative power which these typical studies supply as the children come to examine and explain foreign lands.

The children will appropriate much more rapidly the geography of Europe, with its surface features, cities, commerce, populations, productions, manufactures, forests, rivers, etc., if they have already acquired a large fund of accurate information on similar topics in North America. All the later study, therefore, of Europe, Asia, and other continents, should come in to enrich and amplify ideas which are already familiar to the children, presenting constantly new phases of the same subjects. This will also offer an opportunity for interesting comparative study, which is the best possible stimulus for thought, reasoning, and what we might call self-active effort.

Geography, therefore, should not be considered as a series of memoriter exercises. Opportunity to see relations, to trace causes, and to compare, with a basis in facts and real experiences, is constantly furnished in these studies.

The general movement thus far in these three grades is from the simple facts and relations in the home locality in the third grade, to an ever-enlarging horizon in the fourth and fifth grades, till the limits of a great continent have been reached, and even the oceans on both sides have been encroached upon. It is evident, therefore, that as we move outward into this larger world, the topics with which we deal, if

traced out in their causal and typical relations, will become ever near and more complex, and this is true in all the essential phases of georgic phy, such as commerce, manufacturing, physical features, meteorally race, latitude and longitude, agriculture, mining, and manufacturing industries. But it is evident that if the children begin at home to treatopics in the causal and typical relations as based upon things of sets or direct perception, and, gradually reaching out into the state and surrounding states, trace these same causes as they operate in larger mastill larger, yet similar, districts, they will grow up gradually to a conception of the great facts of the physical world and of their influence upon man in his activities.

As we trace out these causal relations in geography, it is almost inevitable that we should touch, here and there, in almost every topic upon facts which are not strictly geographical, but whose materials are necessary to the rounding out of geographical topics. In other words, we are brought into very close contact with history, natural science, language, and drawing. The relations with history are so close. numerous, and interesting that there is danger that we shall forget the geographical aspect of the topic and transfer ourselves to the historical standpoint. There is no part of the continent of North America, from Maine to California, or from Alaska to the Isthmus of Panama, which is not fruitful and suggestive of historical events of great interest. The Hudson River in New York state furnishes no end of interesting historical and traditionary stories. The great lakes and the Mississ ppl valley have been the scene of Indian legends and of pioneer explois which have been found of the most striking value for the children of our intermediate grades. The Alleghany Mountains and the Rocky Mountains are equally rich in adventure, warlike exploit, and proneer biography of the heroic type.

It is well, therefore, to consider in these grades, the fourth and fifth especially, what the true relation should be between the striking geographical topics on this great continent and the equally attractive and prominent historic episodes which have these very same geographical conditions as their setting.

Stories of La Salle, Marquette, and the French explorers upon the St. Lawrence and the great lakes, the pioneer history of the Ohio valley and its tributary streams, of Robertson, Boone, and others, stories of George Rogers Clark, Fremont, Lincoln, Lewis and Clark, and many others, cannot be understood except as great forests, rivers, natural

productions, Indian tribes, mountains, prairies, and plains of North America are picturesquely brought to mind.

Shall we not have a series of great geographical topics running parallel with an equally important series of early historical biographies which will lend a double meaning to both geography and history? This question is only a prelude to another. Is there an equally important third series of topics dealing with the plants, animals, physical features, metals, climatic conditions (meteorology), geological forces, inventions based upon physical science, and other topics of natural science which together constitute a series of varied practical science lessons drawn from this same country which seems thus to be so rich in topics of every kind?

Incidentally we may mention that composition and drawing exercises will find the choicest materials with which to enlarge their lessons from this same group of topics.

At present our principal concern is to lay out a series of well-selected geographical studies for the grades of the common school, but so far as this series of topics leads us to close contact with other great groups of closely related studies, we are justified in giving them passing attention.

A COURSE IN GEOGRAPHY FOR THE GRADES OF THE COMMON SCHOOL.

The outline of such a course, briefly stated, would be as follows:

Third-grade, or home-geography includes local surface features, drainage, soil, gardening and agriculture, food products, house-building and related trades and occupations, clothing and the sources from which it is derived, local commerce, roads and bridges, railroads, local government, including the town council, board of education, county officers, courthouse; and a study of the sun and moon and a few of the more noticeable constellations, with the changes of the seasons. All these topics should be worked out in the third grade as concretely as possible, based upon the common observations of the children in the neighborhood and reinforced by excursions which are made by the teacher and the children in the regular course of instruction.

Nearly all of the fundamental topics of geography are illustrated concretely in the home surroundings. We have occasion, also, to trace out the relation of the home products, industries, streams, and surface features to the larger world lying at a considerable distance from the

home. Children, and in fact most of the teachers, are deficient in the clear knowledge of these topics. In consequence excursions are necessary. It is of advantage to go to mills and factories, machine shops nurseries, stores, freight offices, river banks, and hilltops, and descrite these upon the spot. In fact, so inaccurate and defective are the observations of the children, even in the presence of the objects, that it is necessary thoroughly to reproduce and clarify, in the schoolreous topics which have been observed upon these excursions. Children often fail to see the essential part or purpose of a machine or of an other object of study, and it requires just as much skill in the teacher to secure accuracy in the proper relation and interpretation of objects as seen by the children as it does to teach a lesson in the class room

Besides this, in the third grade, while the children are getting these various geographical concepts of the home, they should be given some larger views of the earth as a whole, as a great ball in space, whose surface is varied by continents and oceans, upon which the sun and mood shine from a distance. Children are as much interested in learning about the earth as a whole, if properly instructed, as they are in studying the vegetables that are produced in a neighboring garden. They should get acquainted with the great continents and oceans, and especially with North America and the United States, upon the globe, in their general relations to the earth as a whole, so that, as they move forward in their future study of geography, they will have before them the general relations of the home to the great earth.

In this connection the study of The Seven Little Sisters and its companion book, Each and All, in the third grade, winter term, is quite helpful to the children in carrying them out along interesting lines to

the knowledge of different parts of the world.

In the fourth grade it should be the chief business of the geographical work to make a study of the home state and of that great section of the country in which it is located. For Illinois the Mississippi valley, for New York state the eastern Atlantic states. For those living in the Mississippi valley the first great object of study in its leading points of interest is the Mississippi valley itself, its typical geographical objects. A careful study will give the children a clear knowledge of most of the fundamental conceptions in geography, the rivers, inland seas, lake ports, railroad lines and systems, mines of coal, iron, and lead, river cities with their water connections, great agricultural productions like corn and corn-growing, cultivation of cotton, raising of tobacco.

use of forests, construction of canals, rock quarries, manufacturing industries for iron, glass, clothing, agricultural machinery, watches, etc. Out of the multitude of occupations, industries, and out of the variety of natural scenery, plains, mountains, valleys, forests, and changes of season, we find a complete series of great geographical studies in the home state and in the neighboring states which will exercise the fullest intelligence of the children. In fact, the number and variety of important topics is so great that it is necessary to select a few out of the many for more accurate and picturesque treatment.

It is just at this point in the selection and fuller treatment of great types that the secret of true method in geographical study is to be found. Not a description, enumeration, or catalogue of all the rivers, cities, lakes, productions, and multitudinous details of other sorts which this marvelous Mississippi valley can display, should be loaded upon the children, but choice descriptions and discussions of those leading topics in every important line which furnish the best types of great geographical classes. A description of one canal in Ohio or Illinois may well stand, in the main, as a description of all canals to be found along our lakes and rivers. It is true that all of the important canals should be located in their relative significance and value after one that is typical has been described. A description of one great blast furnace or rolling mill, illustrated with pictures and so on, will answer for all blast furnaces and rolling mills. At the same time the leading centers of the iron industry, as Pittsburg, Chicago, Birmingham, and Philadelphia, should be explained. An account of one large cattle ranch may be extended to compass easily all cattle-ranch industries of the plains. And likewise in the cotton industries, in sugarmaking, in lumbering, in boot and shoe manufacture, in the description of mountains, rivers, commercial centers, lakes, and mines.

Our series of topics, therefore, for the fourth-year work in the Mississippi valley might be stated as follows:

I.

THE ILLINOIS RIVER AND ILLINOIS AND MICHIGAN CANAL.

- Map of the state of Illinois in outline, showing Illinois River and canal.
- 2. Trip by canal boat from Chicago down the canal past the limestone quarries, Joliet, along the Illinois River to Peru, where the canal

connects with the Illinois River. The locks, aqueducts across streams, products shipped on the canal, and history of the canal.

- 3. Trip down the Illinois in a steamboat, Lake Peoria and Peoria, slack water navigation at Henry. The bottom lands and bluffs, commerce on the rivers, railroad bridges, the fisheries, trip on the lower river, and its junction with the Mississippi.
- 4. Recall the trip of La Salle and Hennepin down the Illinois in the early exploration of Illinois.
- 5. Let children draw the map of the state and locate the cities on the course of the river and canal.
- 6. Notice the low and narrow watershed between Lake Michigan and the Illinois River.
- 7. Later during the year notice the canals in Indiana, Ohio, and Wisconsin which connect the Mississippi or its branches with the great lakes. Compare these other canals with the Illinois and Michigan Canal in length and importance.

II.

THE PRAIRIES OF ILLINOIS.

- 1. Description of a wild prairie in central or northern Illinois as it appeared in early times.
 - 2. Prairies as now seen, fields of corn, meadows, groves.
 - 3. Prairie fires in early times.
 - 4. Relation of the prairies to the forest belts along the streams.
- 5. Soil and productiveness of the prairies. The bad roads. Railroads easily built over the level land.
- 6. Difficulties of the early settlers in breaking the prairies. Use of machinery at present.
- 7. Wild game and animals in former times. Live stock now raised upon the prairies.
- 8. Locate the states and parts of states that compose the great prairie belt, with its black soil and rich grains and live stock.

The map of the United States and of North America should be kept before the children and the districts discussed by them drawn in outline.

III.

CORN AND LIVE STOCK IN ILLINOIS.

1. The great cornfields of Illinois. The seasons of planting, cultivation, and harvest. The need of hot weather and rains of summer.

- 2. Husking, cribbing, and shipping. The relative advantage of railroads, river, and canal for shipping.
 - 3. Fattening of stock upon the farms and shipment to the cities.
 - 4. Grains and other farm products.
- 5. The mills and factories using grain (as flour mills, distilleries, breweries, glucose factories), canning factories, packing houses, stockyards in Chicago, and elevators.
 - 6. The dairy farms in Illinois and their products.
 - 7. Vegetables, berries, and fruits of the prairie regions.
- Comparison of Illinois and the neighboring prairie states in corn, grain, and stock-raising.

IV.

A COAL MINE AND THE COAL FIELDS.

- 1. Location and description of a local coal mine. The shaft, the ventilation, dangers of mining, blasting, the safety lamp. Workmen in mines, hoisting, pumping out the water.
- 2. Uses of the coal on railroads and rivers, in factories and buildings, in iron reduction and gas works, in power-houses and rolling-mills.
 - 3. Especial value of the coal to prairie countries.
 - 4. The shipment of coal to cities.
- 5. Location of the great coal fields of Illinois, Indiana, and Kentucky. The broad coal fields in Iowa, Missouri, and Kansas.
- 6. Later, in fourth grade and in the following year, the coal fields of the Alleghany Mountains and of other districts east and west should be located and compared with those of the central Mississippi valley.
- 7. Later, also, a comparison of coal-mining with iron-mining, gold, silver-, and lead-mining may be profitably made, both as to the value of the product and the method of mining.

The coal-bearing districts should be distinctly located by states, as in Frye's Geography and in Tilden's Commercial Geography. Before completing the geography of North America, the whole subject of the coal fields should be gathered up into a single topic, and not only the leading coal areas located, but the chief cities also as centers of the coal trade, as Pittsburg, Erie, Chicago, St. Louis, etc. In this way the important relation of coal-mining to the great commercial, manufacturing, and domestic interests of the people can be clearly seen. There is little or no danger that even as large and complex a subject as this will be too difficult for the children, if it is treated concretely. Let

the facts be seen in their necessary connections. Children en enthinking and reasoning, if they have definite and manifest things treason and think about.

V.

EXCURSION ON THE UPPER MISSISSIPPI FROM ST. LOUIS TO ST PAL.

- 1. The great crooked trough of the river. Bluffs, lowlands, forest along the bluffs and tributary valleys.
- 2. The cities and railroads running parallel through the valer Quincy, Davenport, Dubuque, La Crosse, Rock Island, Winona. Resons for the location of these cities.
- 3. River commerce, steamboats. Compare it with freight on the railroads. The lumber raits.
- 4. The scenery at the most interesting points, as at Rock Island and Dubuque, Trempeleau Mountain, Sugar Loaf at Winona, Like Pepin, and Maiden's Rock.
- 5. Improvement of the navigation by jetties at Rock Island, Keckuk, and below St. Paul. Low water in summer and the canal around the rapids. The floods of spring and the damage done.
- 6. The river in winter. The ice harvest along this part of the river and its shipment south.
- 7. Recall the story of Marquette and Joliet's first trip on the Mississippi. Also Hennepin's.
- 8. St. Paul the head of navigation. The junction of the Mississippi and Minnesota just above St. Paul. Fort Snelling. The Falls of St. Anthony. The best pictures in the geographies and from geographical readers, guide-books, etc., should be employed. Make a comparison of this part of Mississippi with the Illinois River, already studied, as to size of the stream, bluffs, and scenery, cities, railroad bridges, commerce. Distance from St. Paul to St. Louis.

This part of the great river, if clearly defined and illustrated, will form an intelligent basis of comparison with many important rivers in the following years.

VI.

MINNEAPOLIS AS A TRADE CENTER.

- 1. Advantages of its location, especially the water power and river.
- 2. Logs, lumber, sawmills, and the distribution of lumber to the prairie regions. Need of railroads to the West, Southwest, and Northwest. Also to the East.

- 3. The wheat fields and other grainfields of Minnesota and the Northwest. Red River valley. Shipment of grain to Minneapolis. Grain elevators. The big flour mills and the use of the water power. Shipment of flour and wheat via Chicago and Duluth to New York and Europe.
- Minneapolis and St. Paul compared as to their advantages for shipping, manufacturing, wholesale trade.
- 5. Minneapolis compared with Winona, La Crosse, Dubuque, and Davenport, Rock Island and Clinton, as centers for the lumber and flour business, river and grain trade, etc.
- 6. Places of special interest near Minneapolis. The State University just below the falls on the bluffs. The Falls of Minnehaha. Lake Minnetonka.
- 7. Recall the story of Hennepin at the falls and of Hiawatha at Minnehaha Falls.

Minneapolis as a type of commercial cities and as a basis for comparison with other cities, later studied, is remarkably good. Its characteristics are very prominent and easily grasped.

VII.

THE PINERIES AND LUMBERING OF THE UPPER MISSISSIPPI.

- 1. The pineries around the headwaters of the Mississippi.
- Logging camps in winter. The value of the snow. Skidding. The logs piled along the banks of streams.
- 3. The melting snows and freshets of spring. Clearing the rivers. Sending the logs down the streams. Rafts and rafting steamers. The log jams.
 - 4. Sawmills and planing-mills at Minneapolis.
 - 5. The climate of these lumber regions in summer and winter.
 - 6. The rapid clearing away of the forests, effects upon the rivers.
 - 7. The forest fires.
- 8. Lumbering in Wisconsin, in Michigan, in Canada, Maine, and New Brunswick.
- o. The great belt of pine forests stretching from Minnesota to Nova Scotia. The series of great lumber cities, from Minneapolis to Halifax, as Chicago, Saginaw, Detroit, Cleveland, Buffalo, Albany, Bangor, St. John, Quebec, and Montreal.

In the later studies of this and the following year, the hardwood forests of North America may be located and compared with the

pineries, e. g., the Ohio valley forests, the forests of the Alleghanies, the forests of the southern states and of the Pacific coast.

VIII.

CHICAGO AS A TRADE CENTER.

- 1. Location on the lake. Connection with the Illinois and Mississippi by canal. Original site of Chicago. Swamps.
- 2. Chicago River and making a harbor. Dredging the river, breakwater.
- 3. Great staple products centering here. Wheat and flour from the Northwest. Corn and live stock from the West and Southwest. Lumber from Michigan and Wisconsin and Canada. Iron and copper from the mines of Michigan, Wisconsin, and Minnesota. Coal from Illinois and Pennsylvania. Fruits from the South, East, and West. Manufactured products from the East and Europe.
- 4. Manufacturing in Chicago. Iron mills, breweries and distilleries, meat-packing, agricultural machines. Fine lumber and furniture, books, leather, boots and shoes, cars and machinery. Where these products are sent.
- 5. Public works, waterworks, drainage-canal, parks and boulevards. The Columbian Exposition, museums, universities, high buildings, elevated roads.
- 6. Advantages for shipping by water and rail. Number and importance of railroads centering here. Directions from which they collect and distribute products. Railways and waterways to the East, to New York.
 - 7. The early history of Chicago. The great fire.
- 8. Compare it in size and importance with Minneapolis and St. Paul; later with the lake ports Milwaukee, Detroit, Cleveland, Buffalo, Duluth.

Later on in the course of study Chicago may be made a standard for measuring the importance of New York, Philadelphia, Boston, St. Louis, San Francisco, New Orleans, and the great cities of Europe and the world. For this purpose it is needful to trace out closely the great extent and variety of Chicago's commercial connections and advantages.

It may be found advisable to postpone this topic till toward the end of the fourth-grade work, when more of the producing regions of the Mississippi valley will have been treated. Thus the wide-reaching forces and productive districts which give importance to Chicago will be more easily seen.

This topic is not unduly complex or difficult, if well illustrated by pictures, maps showing railroad and water-traffic routes, and definite descriptions of occupations and products. Seeing the facts in their causal connection, and all centering in a great trade metropolis, will interest and hold the children.

The constant reference to the small trade centers already studied, as Springfield, Minneapolis, the county seat and home village, will help to build up this series of ideas into a consistent group or class.

IX.

THE IRON MINES OF MICHIGAN.

- Location of the iron mines along the south shore of Lake Superior.
 - 2. Description of the mine and getting out the ore.
- 3. The transportation of the ore in cars down the inclined planes to the lakeshore. The great ore docks and the loading of lake steamers. Transportation to Chicago, Detroit, Cleveland, Buffalo, etc.
- 4. Locate the iron-producing districts of Minnesota, and Wisconsin, and Missouri, and Colorado.
 - 5. The relation of the iron ore to the coal fields.
- 6. In the next grade locate the great centers of iron production and manufacture in the Alleghanies, as Pittsburg, and Birmingham, and Philadelphia, and also Pueblo.
- 7. Importance of the shipment of iron ore on the lakes. It exceeds the shipment of grain in tonnage. Shipment of iron ore by rail.
- 8. The copper mines of Michigan may be briefly given and compared with the iron production, etc.
- There should be incidental comparison of iron-mining and coalmining previously studied.

This topic comes up again in an important form in England and Germany, in sixth-grade work. The definite knowledge of our own iron production will help greatly there.

X.

THE BLAST FURNACE AND STEEL PRODUCTION.

- 1. Necessity for reducing the raw ore, roasting.
- 2. The blast furnace, its construction.

- 3. The materials for the flux, lime, coal, ore.
- 4. The heating and the blast. Circulation of water through use sides of the furnace for cooling.
 - 5. Drawing off the ore. Slag, pig iron.
- 6. Uses of pig iron in iron manufacture, in nail mills, foundre stove works, rolling-mills, beams for buildings, wire mills, armor pixe
 - 7. The puddling furnace.
 - 8. The manufacture of steel.
- 9. Cities where blast furnaces abound. Joliet and Chicago. & Louis, Pittsburg, Buffalo, Cleveland, etc. Comparison of these cases to their positions and advantages for the iron manufacture and are trade.

Trace the iron from the mines through the blast furnaces, steel making process, etc., and through the factories to the machines and uses of iron in life, in stoves and furnaces, telegraph wires, cooking utensils, engines, cutlery, steam pipes, nails, construction of buildings, rails on the tracks, iron ships, magnetic needle, etc., etc.

XI.

LAKE SUPERIOR.

- 1. Location and area of the lake. Its depth.
- 2. Tributary rivers and streams. They drain an area of 53,000 square miles.
- 3. Scenery of the lakeshores. Cliffs of the northern shore. Dark forests of the hills and cliffs. The "pictured rocks" of the southern coast. Fishing and hunting in the forests and trout streams. The islands in the lake. Deep, cold, clear waters of the lake.
- 4. The cities along the shores Marquette, Duluth, West Superior, etc
- 5. The commerce of the lakes. Iron, coal, grain, copper, lumber, etc. St. Mary's Falls and the locks. The lake steamers and whale-backs.
- 6. The storms, fogs, and winter upon the lake. The peculiar dangers of navigation. The season of navigation.
- 7. The railroads along the northern and southern shores. Shipping rates on the railroads and upon the lakes.
- 8. Comparison of Lake Superior with the other great lakes in size, depth, climate, commerce.

The peculiar climatic and physical conditions of this northernmost

of the lakes should be clearly explained. It is perhaps the largest and the most important of the fresh-water lakes of the world, and by comparison will show striking points of resemblance and contrast with the larger lakes and inland seas of America and other continents.

XII.

THE SERIES OF GREAT LAKE PORTS.

- 1. Duluth, Milwaukee, Detroit, Cleveland, and Buffalo. Each the traffic and manufacturing center of a state.
- 2. Compare Milwaukee and Detroit as trade centers of Wisconsin and Michigan.
- 3. Compare the advantages of Duluth with Chicago for the grain and iron trade.
- 4. Compare Buffalo and Cleveland in size, commerce, and manufactures.
- 5. In what ways do Buffalo and Cleveland contribute to the trade of Milwaukee and Duluth, and vice versa?
- 6. Compare the combined population and trade of all the other great lake ports with those of Chicago. Why has Chicago outgrown all the others?
- 7. Compare the great lake cities with the series of cities already studied on the Mississippi from Minneapolis to St. Louis.
- 8. What are the chief staple products shipped back and forth from east to west, and vice versa, along the great lakes?

Later in the year a comparison may be instituted between the lake ports and the cities of the Ohio River from Pittsburg to Cairo. Later still all the great cities of the Mississippi valley may be compared with those of the great lakes and the St. Lawrence.

XIII.

THE HARDWOOD FORESTS OF INDIANA AND THE OHIO VALLEY.

- 1. The original forests of Indiana.
- 2. The labor of the pioneers in clearing the forests.
- 3. Wild game in the old forests.
- 4. Hardships of the early settlers, log houses, bad roads.
- 5. The present forests of Indiana.
- 6. The forests of Ohio, Kentucky, West Virginia, and Tennessee. Forest regions still left.
 - 7. Effect of the destruction of the great forests.

- 8. The great "national road." The Ohio River as a route of train early times. The building of canals and railroads. The grace roads for country travel.
- 9. The lumber business in the Ohio valley. Sawmills. Kinds lumber and their uses. Lumber rafts on the Ohio.
- to. Comparison of the hardwood forests with the pineres of Les lake states. The differences in climate, cold, rainfall, and product

A little later on the whole Ohio valley, with its tributary stream of cities, products, commerce, people, and climate, may be compared wo the Mississippi above its junction with the Missouri. This will best to low the treatment of tobacco in Kentucky and the surface of Tennesses.

XIV.

TOBACCO-RAISING IN KENTUCKY.

- 1. Soil and climate needed for tobacco.
- z. Steps in the cultivation of the crop.
- 3. Cutting, gathering, curing in the sheds.
- 4. Effects of tobacco culture upon the soil.
- 5. Louisville as the trade and manufacturing center for tobacco.
- 6. Tobacco production in other states, as Virginia, Missour. Connecticut. The tobacco belt.
 - 7. History of tobacco-raising in America.

A year or more later there will be opportunity to compare the tobacco business in the United States with that of Cuba and the West Indies

XV.

THE SURFACE FEATURES OF TENNESSEE.

- 1. The general slope from the Alleghanies to the Mississippi low-lands.
 - 2. The Smoky Mountains on the eastern border of Tennessee.
 - 3. The valley of east Tennessee.
 - 4. The Cumberland Mountains.
 - 5. Chattanooga and its environment.
 - 6. Nashville and the valley of middle Tennessee.
 - 7. The valley of the Tennessee River.
- 8. The uplands between the Tennessee River and the Mississippia River.
- 9. The bottom lands of the Mississippi overlooked from Memph.s on the bluff.

- 10. The forest and mineral resources of Tennessee.
- 11. Recall the early settlements at Watauga in the valley of east Tennessee and at Nashville.
- 12. Contrast the watersheds on the north and on the southeast of the Ohio valley, the Alleghanies on the one side and the great lakes on the other. There is no high watershed between the great lakes on the one side and the Ohio and Mississippi valleys; hence the canals and easy commercial routes between them. Contrast with this the scenic railroad routes across the Alleghany Mountains in Tennessee, Virginia, Maryland, and Pennsylvania.

XVI.

TRIP ON THE LOWER MISSISSIPPI FROM CAIRO TO THE DELTA.

- 1. General features of the great valley from twenty-five to eighty miles in width.
 - 2. The steamboat and its equipment.
- 3. The change in climate as we move southward twelve hundred miles in March.
- 4. The floods in March and April. Destructiveness of high water. The levees, the crevasse. Expenses of keeping up the levees. New channels made in flood periods.
 - 5. The cities Memphis, Vicksburg, Natchez, New Orleans.
- 6. The immense traffic on the Mississippi before the war. Present traffic on the steamers.
 - 7. The tributaries of the Mississippi below St. Louis.
 - 8. The jetties at the delta. Captain Eads' plan and its execution.
- 9. The more recent geological history of the lower valley. The mouth of the river formerly at Cairo. The filling up of the long bay with silt.

The striking features of a great river can be clearly presented by means of descriptions and pictures, and we shall be surprised to see how the same things repeat themselves in the great rivers, the Danube, the Volga, the Indus and Ganges, the Yangtse and Yellow, the Nile, Congo, Amazon, and La Plata.

XVII.

COTTON AND COTTON PLANTATIONS.

- 1. Description of a cotton plantation.
- 2. Raising of the cotton crop. Picking.

- 3. The cotton gin. Baling.
- 4. Cotton seed and cotton-seed oil.
- 5. The cotton-producing belt. Locate by states. Map.
- 6. Manufacture of cotton cloth. Cotton mills in the South. Shi ment to New England and Europe. Compare with wheat, corn. et
 - 7. The difficulty of negro labor since the war.
 - 8. History of cotton plant. Whitney. Slavery.

XVIII.

A SUGAR PLANTATION IN LOUISIANA.

- 1. Raising the cane. Size of fields.
- 2. Cutting and loading.
- 3. The sugar mill. Modes of getting the sap.
- 4. Boiling the sap.
- 5. Refining.
- 6. Shipping.

Later a comparison of sugar-raising in the West Indies with that of Louisiana. The beet-root sugar industry compared with that of cast sugar. Maple sugar and the mode of its production.

XIX.

A CATTLE RANCH IN TEXAS.

- 1. The ranch. Houses, stables, the range.
- 2. The cowboys; their skill with horses and cattle.
- 3. The yearly round-up. Branding cattle.
- 4. Losses from estrays and storms.
- 5. The cattle ranches from Texas to Montana and Dakota.
- 6. Shipping to market.
- 7. Feeding cattle in the corn belt.
- 8. Centers for the packing business. Kansas City, etc.
- 9. Climate and rainfall of the great grazing plains. Severity of the northern winters. Heat and drought of the southern summers.
 - 10. Recall the great buffalo herds of a generation ago.

XX.

IRRIGATION AND THE BIG DITCH AT DENVER.

- 1. The arid region about Denver.
- 2. The city ditch and smaller irrigation ditches along the river.

- 3. The plan and location of the big irrigating ditch. Its source in the mountains.
 - 4. Construction of the big ditch, tunnels, flumes.
- 5. The excess of water in the spring, with the melting snows and rains. Reservoirs.
 - 6. Drawing off the water onto the land.
 - 7. Water taxes. Rights of companies.
 - 8. Regulation of water in ditches by law.
 - 9. Effect of irrigation. Products, groves, gardens, orchards.
 - to. Sale of products from irrigation farms.
 - 11. Irrigation from lakes along small streams from the mountains.
- t2. Irrigation along the Arkansas and other rivers flowing eastward from the Rockies.
- 13. Advantages of agriculture by irrigation as compared with that by natural rainfall.
 - 14. Irrigation by artesian wells.
- 15. Importance of irrigation to Colorado and the Rocky Mountain states.

Later in the study of the Pacific states, of Africa, and Asia the subject of irrigation will often recur.

XXI.

PIKES PEAK AND THE ROCKY MOUNTAINS.

- r. Pikes Peak in a spur of the Rocky Mountains.
- 2. Its height above the sea and above the plain at its base.
- 3. Trip from Manitou to the top of the peak.
- 4. The railroad to the top.
- 5. Broad view from its summit.
- 6. Clouds, rains, and snows about its summit.
- 7. Places of interest in the neighborhood. Manitou, Cheyenne Cañon, Garden of the Gods, Monument Park, Williams Cañon and Cave of the Winds, Colorado Springs.
 - 8. Pikes Peak and vicinity as a great summer resort.
- o. The great peaks of Colorado, as Grey's Peak, Long's Peak, the Spanish Peaks, and Mount of the Holy Cross. The Royal Gorge in the valley of the Arkansas. Clear Creek Cañon.

The climate and scenery of this great barrier of mountains can best be understood by a description in detail, with pictures of the objects mentioned. The foregoing twenty-one topics will constitute the main botilessons for the fourth grade. But there are also certain other less and exercises interspersed among these which will help to give crate tion and completeness to these twenty-one chief topics.

- 1. There will need to be certain oral and written drills in fact, important groups of states, series of cities, links in long trade roots the leading products of a state or larger district, the causes of climical conditions in the winds, distance from the gulf or ocean, mountains or plateaus.
- 2. There will be outline map drawings of states and groups of states, or particular producing areas.
- 3. Certain important cities, like Indianapolis, Kansas City, Omabibes Moines, Madison, and others, which have been scarcely mentioned in these topics, will be brought into relation to these topics and understood in their importance. The same of rivers, like the Wisconst Wabash, Cumberland, Big Sandy, etc.
- 4. Some of the lesser topics, like fruit-growing in Michigan, the cranberry marshes, the truck-farming, the lead mines, the sait mant facture, the grape culture, etc., will find time for incidental treatment
- 5. Some larger comparisons and contrasts should also be made, c. g., compare the valleys of the Missouri and the Ohio in regard to chimate, productions, forests, rainfall, size, cities, and population. Why these differences? Compare the upper Mississippi above St. Louis with the region of the lower Mississippi in regard to climate, surface products, population. Compare the eastern slope of the Mississippi valley with the western.

One of the chief objections that have been urged against this kind of work is that the books and materials are not at hand for such elaborate and detailed treatments of topics. This objection is already largely removed by use of books that can be had at a reasonable expense, at least in many cases.

The following list of books will be found helpful in the fourth grade, as already outlined, and in the fifth-grade work, which completes the topics upon North America:

- 1. The standard geographies, such as Frye's Geography, Ginn & Co.; Grammar School Geography, Rand-McNally; Natural Advanced Geography, American Book Co.
 - 2. Tilden, Commercial Geography, Leach, Shewell & Co.

- 3. Carpenter, Geographical Reader of North America, American Book Co.
 - 4. King, Geographical Readers, 6 vols., Lee & Shepard.
 - 5. Our American Neighbors, Silver, Burdett & Co.
 - 6. Rupert, Geographical Reader, Leach, Shewell & Co.
 - 7. The Information Readers, 4 vols., Boston School Supply Co.
 - 8. Great American Industries, 2 vols., A. Flanagan.
 - 9. Special Method in Geography, Public School Publishing Co.
 - 10. Ballou, Footprints of Travel, Ginn & Co.
- 11. Appleton, General Guide to the United States and Canada, 2 vols., D. Appleton & Co.
 - 12. Shaler, The Story of Our Continent, Ginn & Co.
 - 13. Stories of Industry, 2 vols., Educational Publishing Co.
 - 14. Lakes of North America, Ginn & Co.
 - 15. King, Methods and Aids in Geography, Lee & Shepard.
- "National Geographical Monographs," ten pamphlets, American Book Co.
 - 17. Longmans' School Atlas, Longmans, Green & Co.
 - 18. Lummis, A Trip Across the Continent, Charles Scribner's Sons.
 - 19. Parkman, The Oregon Trail, Little, Brown & Co.

TOPICS FOR FIFTH GRADE.

The following list of topics for fifth grade is given more briefly than for the fourth. Each topic, however, is intended for the same elaborate discussion:

- 1. Brief survey of the physical features of North America as a whole.
- 2. Niagara Falls as an obstruction in the great commercial route from east to west.
- 3. The Hudson River.— Adirondacks, canals, scenery, commerce, cities, history, stories, and traditions. Comparison with the Illinois and upper Mississippi.
- 4. Mt. Washington.—Trip to the top. The Presidential Range. Interesting points in the White Mountains. The lakes. Summer resorts. Comparison with Pikes Peak and Manitou, etc.
- 5. Boston.— Monuments and history. Commerce and manufactures. Railroads to the West. Hoosac tunnel. Harvard. Comparison with Buffalo, Chicago, and Minneapolis.
 - 6. The St. Lawrence River .- Rapids and canals. Montreal and

Quebec. Climate of the North. Closing of navigation. The Thosand Isles. Falls of Montmorency. Comparison with the lower Mossissippi, with the Hudson. Connection with the Hudson by war Lake Champlain and the canal. The lumber business along the Lawrence.

- 7. Cod fishing on the banks of Newfoundland.—Other fishers.
 The fogs Curing and shipment of fish. Compare with fisher.
- 8. The Alleghany Mountains.— Chief divisions. Rivers that been through the mountains. Delaware, Susquehanna, Potomac, Jane Mineral resources. Railroads crossing the mountains. Forest Chimate. Manufacturing cities, water power. Comparison of coal and iron fields with those already studied
- 9. Iron ship-building at Philadelphia. Where the raw production come from. Compare Philadelphia with Pittsburg in iron production. Compare with ship-building at New York, Boston, etc. Late compare with Glasgow.
- building. Halls of Senate and House. The lawmakers. The Write House and President. Cabinet. The Supreme Court and its dute. Other public buildings. Washington monument. Mt. Vernon. Hotory of the city. Compare national government with state government and local government.
- 11. The oyster fisheries of the Chesapeake. Location of other oyster beds along the Atlantic. Compare it with the cod fisheries.
- 12. The James River and surface features of Virginia.— Tide-water region. Uplands, mountains. Richmond, head of navigation, water power. Compare with Minneapolis and other cities. Compare surface of Virginia and Tennessee. Compare the James with the other roots flowing to the Atlantic, as Potomac, Susquehanna, Santee, Savannah, etc.
- 13. The pineries of North Carolina.—Ship supplies. Compare with the woods of Maine and Minnesota,
- 14. The orange groves in Florida and climate.— The climate and is causes. Home of invalids. St. Augustine and other winter resorts. Compare with fruit districts in the North, and later with California.
- 15. New York city.—Its coastwise trade. Trade with the interior Chief exports and where they come from. The harbor of New York-Its trade connections with the interior of North America. Foreign

trade and exports. Immigration and Castle Garden. The great bridge, ferries, parks, docks, and shipping. Manufactures. History of New York. Compare it with Chicago in size, shipping. Later, compare with the cities of New Orleans and San Francisco.

- 16. Cuba as a type of the West Indies.— Havana. Sugar plantations. Compare with Louisiana.
- 17. The Central Pacific Railroad from Chicago to San Francisco.—Difficulties of engineering and construction. How to get across the mountains. Compare it with the old wagon route to California. Chief cities along the route. Products shipped east and west. Mountain scenery on the route. Compare this route with the southern route, with the Northern Pacific, with the Canadian Pacific.
- t8. Gold-mining in California.— Discovery of gold in California. Effect. A gold mine. Location of the gold fields. Placer mining. Reduction of gold. Compare with the gold production of Colorado and other states. The Klondike. Later compare with Australia and South Africa. Value of gold production as compared with silver, copper, and iron.
- 19. Salt Lake and the great basin.—Size and surroundings of Salt Lake. Salt-making. Salt Lake City. Rivers flowing into Salt Lake. Irrigation. Compare with Colorado. The lake in ancient times. The salt desert to the west. Other deserts and salt lakes in the great basin. Causes of the dry climate. Vegetation of the great basin. Its surrounding mountains and shorter ranges. Death's Valley. Story of the early pioneers and explorers.
- 20. The Colorado River and cañon.—Geological history of this region. Powell's exploration of the cañon. Indian tribes on its borders. Present climate and vegetation of the valley. Compare with the gorge at Niagara, with the Royal Gorge of the Arkansas, with the Dalles of the Columbia. Contrast with the Mississippi and St. Lawrence Rivers.
- 21. San Francisco.— Its harbor. Commerce with the coast, Hawaii, China, Japan, etc. Exports and imports. Chinese immigration. History of San Francisco. Compare with Boston and New York.
- 22. The Columbia River and the salmon fisheries. Navigation at its mouth. The Dalles and falls. The valley of eastern Washington.
- and the forests of Washington and the Pacific slope.— Lumbering among the big trees. Climatic conditions favorable to forestry. The big trees of California. The forests of Alaska and British Columbia.

- 24. A trip from Puget Sound to Alaska. Islands and coast scener.

 Sitka. The glaciers. Climate of this coast and reasons. Japan current.
- 25. The City of Mexico.—Climate of the plateau. Life in the cin Public buildings. Surrounding mountains. The Mexican people The government. Reference to the early history.
- 26. The Rocky Mountains as a whole.—Length, breadth, and elention. Climate and products, mineral and agricultural, and grating The mines, forests, rivers, and drainage. The volcanoes and glacies The effect of the mountains upon climate, trade routes, location of cities, industries. Compare the Rockies with the Alleghanies.
- 27. The great plains of North America and their relation to the mountains, oceans, and seas.
- 28. The continent of North America as a whole. Its mountain systems and plains. Its peninsulas and bays, its coast line. Its continental trade routes. Its zones of climate. The distribution of its populations by nations and languages.

There are many other topics that might be selected, but a full hand ling of these will inevitably involve many of the more important one not mentioned. Many drills and map and board exercises will be necessary which are not directly referred to in these topics.

The books which will be most helpful to teachers in this grade were given in the list at the end of the fourth-grade work.

For the sake of illustration one of the topics of fifth grade is worked out, though somewhat abbreviated, as follows:

NIAGARA FALLS AND THE COMMERCE OF THE GREAT LAKES.

Niagara Falls lie midway between Lake Ontario and Lake Eric Lake Eric is nearly three hundred feet higher above the sea level than Lake Ontario. About six miles south of Lake Ontario the level plateau in whose basin Lake Eric lies drops down 300 feet to the plain which borders Lake Ontario. The Niagara River, in making its way from Lake Eric to Lake Ontario, must leap over this bluff or escarpment At the present time the falls are about six miles back from the edge of the escarpment. A stratum of limestone rocks 140 feet thick extends from the edge of this escarpment southward and, dipping gradually, passes under Lake Eric. The Niagara River, as it flows northward, drops over this ledge of limestone rocks at the present site of the falls. It is 160 feet from the edge of the cataract to the level of the river

below. The remainder of the 300 feet of descent is made by the rapids above and below the falls and by the descent of the river. The falls on the American side are small and, in fact, constitute a part of the east bank of the river. The great Horseshoe Falls, which he to the west of Goat Island, constitute the main part of the falls. Here the enormous body of water tumbles into a great chasm from three sides, and it is here that the main action of the water in grinding out the rocks takes place Above the falls is a great series of limestone ledges, over which the broad river plunges, forming a wilderness of waters, as seen from the Three Sisters Islands, very grand and impressive. In fact, the view up the river from the Three Sisters is one of the grandest scenes in nature. The Horseshoe Falls can be best appreciated from the Maid of the Mist as it sails up under the waters from below. Below the falls is the deep, narrow gorge, with its precipitous walls nearly three hundred feet high, through the narrow bottom of which gushes the swift river. How was this gorge formed? It extends about six miles to the edge of the escarpment. As the water tumbles over the edge of the falls, it descends into the river 200 feet deep. The underlying rocks beneath the limestone ledge, already described, are soft shales and sandstone. The rushing waters at the foot of the falls gradually wash out great caves in this softer rock, and the superincumbent mass of projecting limestone breaks off in great chunks and tumbles into the bottom of the river. In the center of the Horseshoe Falls, where the water from three sides plunges into the deep caldron, the action of the water is so powerful as to grind up these loose rocks at the bottom and sweep the sand down the river. On the edges of the gorge, where the action of the water is less powerful, the broken rocks are not ground up and form a sloping side or talus which is found on both sides of the gorge throughout its course. In this way it has been found by close measurements that the falls are yearly receding toward the south, in the middle of the Horseshoe Falls at the rate of from four to six feet a year. During the present century the measurements have been quite accurate, so that the rate of recession is somewhat definitely known. With this as a basis efforts have been made to reckon the number of years necessary for the formation of the gorge, but the estimates have varied from 6,000 to 30,000 years. The gorge between the falls and the escarpment is a most interesting scenic object. An electric railway descends along the eastern edge of the gorge and, passing close by the whirlpool rapids, proceeds along the foot of the cliffs till it reaches Lewiston at

the outlet of the gorge. Here the Niagara River widens into a splendid stream, deep and broad, as it courses toward Lake Ontario. Another electric railway climbs the escarpment on the Canadian side, and on its return to the falls gives excellent views of the river and gorge from above.

If heavily laden grain ships start from Chicago or Duluth, how far can they proceed down the lakes before stopping to unload? If it were not for Niagara Falls, they would not stop at Buffaio, but pass on to Lake Ontario, and perhaps down the St. Lawrence on their way to Europe or New York. As a matter of fact, all the great lake vessels, moving eastward, are compelled to unload their cargoes at Buffalo. If it were not for Niagara Falls, would there be any need of an Erie Canal? or a Welland Canal? Would there be any great city at Buffalo? If great vessels could pass freely from Lake Erie to Lake Ontario, what part of the Erie Canal would still be serviceable? There is at present a branch of the canal from Oswego to the main canal and Albany. In this case what sort of a city would Oswego be? Perhaps the main body of commerce would go down the St. Lawrence, but there are difficulties in the navigation of the St. Lawrence, such as the rapids, which have made canals necessary, the short season of navigation at the mouth of the St. Lawrence, so far to the north, and the fact that all of this commerce must pass through a foreign country. The probability is, therefore, that the canal, in any case, would extend from Oswego to Albany. So far as commerce is concerned, Niagara Falls are an enormous obstruction, making necessary the expenditure of many millions of dollars on canals and railways. Moreover, the traffic route from Chicago, Duluth, and the lake cities is by many times the most important traffic route in America, and Niagara lies at its center. obstructing all free commercial intercourse. The vast importance of this trade route may be seen in the quantity of great staple products like corn, wheat, and packed meats which are shipped from Chicago and the other lake cities to Buffalo, New York, and Europe. The greatest railroad trunk lines follow this route, such as the Michigan Central, the New York Central, the Nickel Plate, and others.

On the other hand, do the great falls perform any service to mankend to recompense for this inconvenience and difficulty? There is immense water power from the falls, and a group of mills on the east side for many years has used a very small fraction of the water for moving mill wheels. But within the last few years engineers have

constructed great water wheels under the falls for producing water power and for converting this power into electrical force. It is being utilized by mills and factories and street-car lines within a radius of twenty miles from the falls. So great is the amount of power which can be generated at the falls and put to use in factories and shops that it is expected that the country about Niagara Falls will become, in time, the greatest manufacturing center in the world. Another reason for these hopes is the fact that raw products of many kinds can be shipped to this point at little expense.

In the early history of explorations we find that Hennepin and La Salle, in trying to navigate the upper lakes, met their greatest difficulties at Niagara Falls. It was necessary to carry a heavy forge and tools over the bluff and along the river to a point six or seven miles above the falls, where, in the rigors of a severe winter, forest trees were cut down and a vessel was built for the navigation of the upper lakes. It was called the "Griffin," and was used by La Salle and his party in their first trip to Mackinaw and Green Bay. The Columbus caravels, which were objects of such interest at the Columbian Exposition, were taken up the St. Lawrence River and through the Welland Canal, reaching Chicago by way of the lakes. Some of the smaller whaleback steamers have made the trip from Duluth through the locks at St. Mary's Canal, the lakes, and the Welland Canal, down the St. Lawrence to Liverpool.

Geologists have been anxious to determine the number of centuries since the Niagara River began to cut its gorge. In this way they would be able to determine the length of time since the glacial period or the ice age in North America. The great glacial sheet gliding down from the north at one time filled Lake Ontario so that the Niagara River could find no outlet into Lake Ontario. At that time the upper lakes must have found an outlet in some other direction. The old channel by which Lake Michigan sent its waters into the Illinois and Mississippi has been found. As the ice receded toward the north, and the waters from Lake Erie were first sent via Niagara over the escarpment toward Lake Ontario, the outlet of the St. Lawrence was still obstructed by ice. In those days the outlet to Lake Ontario was by way of the Mohawk and Hudson, and the old channel has been found. If this were still true, it would remove some of the difficulties of our navigation.

If we compare the falls of Niagara, its gorge and rapids, with the

(alls of St. Anthony at Minneapolis, we shall find that a similar gorge extends from Minneapolis down the Mississippi about five miles to its junction with the Minnesota. But this gorge is only about one-third & deep, though about the same width, as the Niagara gorge. An examination of the rock strata at St. Anthony's Falls will reveal also a similar series of rocks, hard limestone above and softer rock beneath, and a simhar recession of the falls. At Minneapolis, however, great flour miles worth millions of dollars have been established at the western edge of the falls, and the recession of the falls would render them useless. To prevent this a heavy framework of wooden chutes has been built and heavily buttressed, so as to completely cover the rocks at the falls and prevent them from wearing away, thus making the falls stationary. But the old scenic beauty has been destroyed. At Rochester, New York, where the Genesee River plunges over the escarpment toward Lake Ontario, a series of falls and gorges is found which is explained in the same manner as Niagara Falis. It will be of interest to compare other falls in North America, like those of the upper Missouri, Yellowstone Falls in the park, and the falls of the Columbia, with those of Niagara, to see if similar causes are operative. Later in the study of Europe, Africa, and other lands, we may compare the falls of the Rhine, of the Nile, the Zambezi, and the Congo with those of Niagara, in their effect upon navigation and traffic.

After completing the study of North America, there lies before us the choice of a movement to the southern hemisphere or to the East and to Europe. We are bound to Europe by historical and commercial relations and also by bonds of kindred, relations more important than those of the structural resemblance between North and South America. The historical and literary associations between North America and Europe are already familiar to the children, in the voyages of the great explorers like Columbus, Magellan, Raleigh, Drake, and others. The children are familiar with the story of English history, of Greece, of Italy, and of Bible lands. Our population has come to America mainly from Europe, and most of us trace our kindred back among people of European states. The great trade routes over which our surplus products are sent to foreign lands have already been traced to Europe in the discussion of topics in our own geography. The work of the sixth grade, therefore, will consist in the study of the leading topics selected from the geography of Europe. This is in many ways an enlargement of our American geography. The surface features, climatic conditions,

productions, industries, commerce, seaports, capitals, and inland seas of Europe are topics which may well be compared with similar ones already studied in America. Europe has greater diversity of language, government, sea coast, population, and industries than America. Being also an older civilization, the historical significance of geography is greater, the works of man are of more interest and variety, the populations are more dense, and most of the industries are carried on with more economy and care.

TOPICS ON EUROPE FOR THE SIXTH GRADE.

- 1. Europe as a whole.— Mountains and plains, peninsulas and seas. Nations. Comparison with North America in size, climate, and physical features.
- 2. Trip by steamer from New York to Liverpool.—Steamship line. Shipments. Ocean phenomena.
- 3. The British Isles. Location and climate. Size as compared with some of our states (Illinois). Latitude. Surface.
- 4. Manchester, center for cotton manufacturers.—Shipment of raw cotton from the United States. Reshipment. Compare with Lowell.
- 5. Iron manufactures at Birmingham and Sheffield.—Compare with Pittsburg.
- 6. London.—The Parliament houses, Windsor Castle, and the Tower. The government of England. The Thames and shipping. Compare with New York. Compare with the government at Washington.
- 7. The colonial empire of England.—Canada, India, Australia, etc. Map of the world. The settlement and early history of America. Emigration from England, Ireland, and Scotland.
 - 8. Ship-building at Glasgow .- The Clyde. Recall Philadelphia.
 - 9. Edinburgh and the Castle.
 - 10. Oxford, Cambridge, and Dublin.
- 11. France and the French people. Language and character. The French in America.
- 12. Paris, the city of art and fashion.—Streets, parks, public buildings. Compare with London, Boston, New York, and Chicago.
- 13. The silk industry at Lyons.— Importance of Lyons as a trade and manufacturing city. Compare later with China.
- 14. Bordeaux and grape culture.—Shipment of wines. Use of wine in France. California wines.

- 15. Mt. Blane and the Alps.—Scenery. Sources of rivers, glaciers. Compare with Pikes Peak and the Rockies. Swiss people.
- 16. The Rhine River.—Surface of the valley, and scenery. Castles and Gothic churches. Great fortresses along the Rhine. The frontier Commerce on the Rhine. Canals. Cities. Compare with the Hudson and Mississippi, and Colorado.
- 17. Berlin, the Kaiser city.—Size and military importance. The German emperor and army. The government. Commerce. Compare with London, Washington.
- 18. Character of the Germans.—Out-door life. Beer gardens.

 Music, concerts, and theaters. Emigration to America. Milwaukee.

 Cincinnati, and other cities with large German population.
- 19. The sugar-beet industry,— Compare with the sugar production in Louisiana and Cuba.
- 20. Holland and the Lowlands.—Delta of the Rhine. Dikes, cities of Holland. Compare with delta of the Mississippi, and New Orleans.
- 21. The Baltic Sea.—Great nations and large cities on its shores. Compare its latitude, climate, and commerce with those of Hudson Bay, Chesapeake Bay, Gulf of Mexico.
- 22. St. Petersburg.—Size and commerce. The Czar and government of Russia. Story of Peter the Great. Moscow, the old capital. Compare the government with that of Germany, England, and the United States.
- 23. The peninsulas of the south of Europe.— Their surface features, mountains, and plains. Climate. Homes of the great historic nations. Greece, Italy, and Spain. Compare them in latitude, climate, and products with Florida and our southern states.
 - 24. Rome.—St. Peter's and the Pope. The Coliseum and other ruins.
 - 25. Genoa and Venice. Architecture and commerce. Columbus.
- 26. Naples.—Vesuvius and Pompeii. Mt. Ætna. Compare with Popocatepetl and Mt. Shasta.
- 27. Madrid and Granada.— Recall Ferdinand, Isabella, and Columbus. The colonies of Spain. Recent war.
 - 28. Athens and modern Greece.—The Acropolis.
- 29. Vienna and the Danube.—Austria a complex of nations. Languages spoken along the Danube. Compare with the Rhine.
- 30. The Mediterranean Sea.—Seven great historic nations on its shores. Its extent and character. Compare with the Baltic and Gulf of Mexico.

- 31. Constantinople and the Turk.
- 32. The Volga and the plains of Russia. Compare with the Mississippi.

There are many other topics in Europe that might well deserve treatment. Many of them will be found to receive incidental discussion in these topics. One of the most important considerations is to avoid shallowness by trying to cover too many topics.

The following are books suitable to use as references for teachers and pupils in working out the topics on Europe, Asia, Africa, and South America, in sixth and seventh grades:

- 1. The standard geographies.
- 2. Badlam, Modern Europe, Silver, Burdett & Co.
- 3. Tarr, Physical Geography, The Macmillan Co.
- 4. Johonnot, A Geographical Reader, American Book Co.
- 5. Heilprin, The Earth and its Story, Silver, Burdett & Co.
- 6. Hutchison, The Story of the Hills, The Macmillan Co.
- Badeker's guide-books of Great Britain, the Rhine, etc., Karl Badeker, publisher, Leipzig.
 - 8. Scribner, Geographical Reader, American Book Co.
 - 9. Ballou, Footprints of Travel, Ginn & Co.
 - 10. Badlam, Views in Africa, Silver, Burdett & Co.
 - 11. Carpenter, Geographical Reader, Asia, American Book Co.
 - 12. Smith, Life in Asia, Silver, Burdett & Co.
 - 13. Australassa and the Islands of the Sea, Silver, Burdett & Co.
- 14. Reclus, The Earth, Harper & Bros. A somewhat large and expensive book.
 - 15. King, Methods and Aids in Geography, Lee & Shepard.
 - 16. Rupert, A Geographical Reader, Leach, Shewell & Co.

In this brief sketch of Europe we have touched upon the more manifest phases of European geography, and those which have given to Europe a central and controlling importance in physical, political, and commercial geography. Europe has been since the Middle Ages the strong center from which geographical exploration and conquest have been carried on throughout the world. It is, therefore, of importance to study somewhat closely the geographical power and influence of the several European states. A comparison, for example, of the colonial empire of England with that of Spain, and even a short historical statement of the steadily growing power of the one and the declining influence of the other, throw light upon the present distribution of races,

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colonies, and commerce. The great cities of Europe should be compared with one another and with those of North America, so as to classify them and point out the striking characteristics of certain classes. The rivers of Europe likewise should be compared with each other in their commerce, cities, structural basins, agricultural value, historical and scenic interest, and they should be compared constantly with the standards already made familiar in the study of the United States. In selecting these more important topics upon which to concentrate attention, it is not designed to overlook the physical and structural topics, nor climatic influences and zones, nor mathematical geography, nor map-drawing. Time will be found for the broad survey of all of these topics in their influence upon population, productions, and commerce. Our geographical readers are beginning to furnish us with a body of material which can be used for reference studies by older pupils of this grade, such as Modern Europe, Carpenter's Asia, Ballou's Footprints of Travel, Appleton and Bädeker's guide-books. The chief defect of our standard school geographies is the meagerness with which they treat these more important topics. The causal idea as already described and the type notion by which we associate many similar forms under one class are ruling motives. In the study of Europe even more than in the study of America, perhaps, the relation of history and literature to geography should appear. Most of the classical myths and historical stories have their origin and setting in Europe, as, for example, William Tell, King Alfred, Siegfried, the story of Troy, Ulysses, Peter the Great, Frederick the Great, Alexander, Cæsar, and Columbus. It is not our purpose to handle these materials in geography lessons, but to touch upon them constantly and in their natural connections wherever they appear in geographical studies. We have thus outlined our work through the sixth grade.

It may be of interest to inquire here what relation physical geography has to these geographical studies. Instead of putting off the study of physical geography to some year in the high-school work, it seems advisable to incorporate the leading facts of physical geography into the important topics which are handled in the regular course of the grade work in geography. Such topics as volcanoes, mountains, trade winds, ocean currents, rainfall, river channels, glaciers, geological history, and rock strata may be drawn constantly into the great geographical topics and their direct influence upon geography observed. It is important that these materials of physical geography should be

interlaced with the regular geographical topics, because they are so rich and concrete and interesting. They contain the instructive thought material with which geographical topics should be enriched. The danger with our geographical studies is that, by being stripped of their richer scientific materials, they will become formal, dull, and uninstructive.

The seventh-grade work in geography is the last regular year of geographical study, and will comprise the leading geographical topics in the remaining parts of the world not already studied—Asia, Africa, Australia, South America, the oceans and islands. It will also include some other comprehensive topics in mathematical geography and physical geography, climatic zones, and classification of larger regions of the world, such as the great mountain systems, plateaus, deserts, plains, forests and agricultural regions, river valleys; also descriptions of the leading races of the world and the territories which they occupy.

In this stretch of topics there is a very great variety of material, and it will be somewhat difficult to select those topics which are at once most important, typical, and comprehensive, but it is necessary here also to find the more striking subjects, important in their influence and causal relations in geography and because of their representative character. Such a list as the following will illustrate at least the ideas at the basis of the selection: (1) A trip from London to Calcutta, via the Suez Canal, and a description of the canal itself. (2) Himalaya Mountains as the center of the physical structure of Asia; the influence upon climate, rainfall, rivers, productions, and populations. (3) The Yangtse River and its cities and commercial importance in central China. (4) Overland trade routes through Siberia to China; also the great Siberian railroad now being built through southern Siberia to Vladivostock. (5) Tea culture in China. (6) Tokio, Yokohama. Character of the Japanese. (7) Ganges, or the sacred river of India, from its rise in the mountains to the delta; its cities, population, etc. (8) The Tigris and Euphrates valley; ancient cities and empires. (9) Java, people, Dutch government, climate, productions; comparison with other East India islands. (10) Manila and the Philippines. (11) Ranch life in Australia. (12) The great coral reef. (13) New Zealand. (14) The Nile River and valley, from the lakes in central Africa and from Abyssinia to the delta of the Nile. (15) The Congo River. Great negro population of central Africa. Falls and commerce of the river.

Stanley and Livingstone. (16) The diamond mines of South Africa Cape Town as a British colony. (17) Desert of Sahara. Character and causes of the desert. Caravans, commerce; comparison with other deserts of the world. (18) Madagascar. (19) French possessions a Africa. (20) Rio Janeiro and the Portuguese in Brazil. (21) Cones production in Brazil. Its shipment. (22) Amazon valley. Its forests climate, productions, sources of the river, commerce, native people cities. (23) The Andes Mountains, their influence upon South America; comparison with the Himalaya and the Rocky Mountains (24) Chili. (25) Buenos Ayres. (26) La Plata River. (27) Populations of South America. Spanish, Portuguese, Indians. (28) Atlantic Ocean; map of the ocean, depths, its trade routes, trade winds, Gut Stream. (29) Greenland and the north. (30) Hawaii and the islands of the Pacific Ocean. (31) Pacific Ocean. Its commercial routes. Its surrounding nations. (32) Nicaragua Canal.

It will be found that most of these topics bear a definite relation to the topics previously studied, in Europe and North America; for example, great mountain systems will be compared with those of Europe and North America; leading industries, as agriculture, manufacturing, commerce, and mining, are an enlargement of these topics already studied. The colonial possessions of the European states will be seen in Asia, Africa, Oceanica, and South America. Great trade routes of the world will be studied in their largest comprehension leading populations of the globe, most of them having already been studied, will be definitely related and compared. It will be found that constant opportunities are given for review of the previous topics by means of comparisons of rivers in Asia and Africa with those in America and Europe; also of cities, nations, industries, productions, imports and exports.

The method of treatment for these topics in the seventh grade will render possible a larger use of reference books, geographical readers, travels, guide-books, physical geography, and commercial statistics. Children of this age can work up a good share of the topics from good reference materials. The common grammar-school geographies contain good maps and short statements on all the points studied, but are not rich enough in detailed material for the best instruction. It is necessary to teach children how to use reference books, and the teacher must be very explicit and definite in the assignment of topics for reference material. Map-drawing, also, should be brought into use in

such a way as to give a ready grasp of the general form and relations of the continents and oceans. Whatever is presented and discussed in the class should be organized into definite topics, should be sufficiently reproduced and definitely outlined, so that each child shall be able to master the subject-matter.

At the close of this outline of grade work are appended three series of studies, illustrating the connection of topics from grade to grade and the value of review by comparison.

A SERIES OF TOPICS RUNNING THROUGH THE GRADES ON THE STUDY OF GOVERNMENT.

(1) The local town government. (2) State government at Spring-field or of any other state capital. (3) The government at Washington. (4) Government of England centering in London. (5) St. Petersburg and the Czar. Governments of China, Brazil, etc.

This series of topics, beginning with the local matters familiar to the child in his own home and reaching out gradually to the state and nation in which he lives, and in the later grades leading to the study of foreign governments and their comparison with our own, gives us an illustration of the successive topics in one great geographical subject. Each of these will be briefly treated as follows:

1. The local town government. Town councils elected by the people are familiar to the children and should be named. They have charge of the streets, sidewalks, bridges, appointment and payment of the police, waterworks, gas or electric-light plant, and expenditure for other purposes. The mayor of the town is also an executive officer who is directly responsible for the ordinances which are passed by the council. The justice of the peace in the village tries the cases which come before him under the law. We have, therefore, in the village, the law-making power, administrative authority, and the local judge for the trial of cases. Matters concerning which laws may be passed, as streets, bridges, etc., ought to be mentioned; also the granting of licenses for the sale of tobacco, liquors; concerning bicycles, peddlers, the care of the poor, and of tramps; concerning health, the amount of tax levy, and other matters. If the children live in a small city, or even in a larger city, these topics may be somewhat enlarged, and the importance of the topics just mentioned may be illustrated in a more striking way. This topic is also connected with the affairs of the local school board elected by the people, which administers the affairs of the

schools, provides for the buildings and teachers, and the expenditure of money for the general purposes of education.

A second topic not mentioned in the outline, well worthy of study, is that of the county government as centering in the courthouse, with its county officers and their administration of county affairs. An excursion by the children to the courthouse, including a visit to the courtroom and to the offices of the county recorder where the titles to property in the town and county are preserved, is a source of excellent training. Who pays the expenses of the county government? The salaries of the county officers? The cost of the county courthouse and the expenses of the county court? The topics which we have just referred to should be handled in the third grade as an essential part of the geographical instruction which embraces the leading topics of home geography.

2. The second chief topic in connection with the government will be treated in the fourth grade, perhaps a year later, and deals with the government at the state capital, as, for example, Springfield, Illinois. The state Legislature, consisting of the House and the Senate, is made up of members selected from the different representative and senatorial districts of the state and elected by the people. This legislative body of two houses makes the laws of the state under conditions imposed by the state constitution. Laws made by the state Legislature deal with railroads, as, for example, the fare to be charged, precautions at crossings, bridges, etc.

State laws also are made upon subjects of state taxation, the building or repair of canals, granting charters to cities, in regard to temperance and the manufacture of liquors, in regard to the school affairs of the state; also concerning the state institutions for the defective classes, as the orphan asylums, blind asylums, insane asylums; also for the state schools of agriculture, the normal schools, and the university. State laws are also made in regard to the coal mines, building and loan associations, insurance companies; also in regard to the state militia and equipment. All bills must be agreed upon by both houses of the Legislature before they become laws, and are also generally signed by the Governor of the state. The Governor, who is also elected every four years by the people of the state, lives at Springfield, and with his cabinet is charged with carrying out the laws of the state. He has the power of appointment of many of the officers and commissions, as, for example, the governing boards of the educational institutions

and many other state commissions. He is also at the head of the militia of the state, and calls it out in case of serious disturbance or war.

A third division of the government at Springfield consists of the State Supreme Court, which meets at the capital to try cases which are brought before it under the laws of the state. This court of judges has the final decision of important cases arising under the state laws, for example the recent reapportionment of the state. But a law passed in the Legislature was lately pronounced unconstitutional by the Supreme Court, and thereby it ceased to be a law, although passed by the state Legislature and approved by the Governor.

In the city of Springfield is found the state capitol, a massive building built at the expense of the state, in which are found the large assembly rooms of the House of Representatives and Senate, State Supreme Court, and the offices of the Governor and other state officials. A picture of this building should be shown to the children and the principal rooms explained; also the other interesting buildings and monuments found in the state capital, as, for example, the old state house, now the county courthouse at Springfield, the old home of Lincoln, the Lincoln monument at the cemetery. The railroad or other connections of the state capital with other parts of the state should be noted, and the most important state institutions should be located.

No such exhaustive treatment of any other state government than that of the home state will be found necessary as the children advance to the study of other surrounding states. The capitals of the various states will be incidentally located as we study the other states of the Mississippi valley and of the country.

3. In the fifth grade the topic of government comes up on a larger scale in connection with the study of Washington as the capital of the United States. It should be made instructive and interesting by means of pictures of the great public buildings, important monuments, and historical objects of interest in the city. The great Capitol building will naturally be the center of this topic, and the three principal headings will be Congress, the President, and the Supreme Court. The law-making power, or Congress, should be explained in the concrete treatment of the laws which are passed by Congress; for example, the late tariff law which fixed the tariff on many kinds of manufactured goods imported into this country; the Internal Revenue Law which levies duty upon tobacco, whisky, and luxuries produced in our own country. Laws are also passed relating to money and coinage, to com-

merce, agriculture, patents, divorce, immigration, peace and war, are navy, post-office, relations with foreign countries, and a great man other important subjects. It should be seen that these laws are such a character as to apply equally to all people of the different state and not to any particular locality.

Pictures should be shown in the geographies of the House of Rept sentatives, Senate, and some of the leading men familiar to the possibilities. Senate and associated either with the Senate or with the House. The President at his home in the White House, his duties, and responsibilities will deserve some treatment. In what way does the President of the United States directly influence the affairs of our own home? What men has he appointed to office in our town, county, of state? What influence has he over the laws that are passed in Congress? Why is he called the chief executive officer? How is his cabinet appointed, and of what does it consist?

The Supreme Court has jurisdiction over all important questions arising under the constitution of the United States. What sort of cases does it try? Examples of its power in this respect must be cited; as, in example, the more recent transactions in the inter-state commerce commission, and other cases. A short account of the history of the city of Washington as the seat of government will be appropriate in this connection. Why does it lie so far to one side of the country? At the time of the founding of Washington, what was the relation of this city to the population of the country? How large a city is it? How does it compare in size with the largest cities, Philadelphia, New York, Chicago, etc.? Study the map of the city of Washington, and locate two or three of the principal streets and chief public buildings.

Compare now the governments of the United States at Washington and of the state at Springfield, and even of the local city or village, and bring out the fact that the government in all of these cases falls into three divisions or departments: the executive, legislative, and judicial. In what relation do the laws of the city, state, and nation stand to each other? How are the officers of these three different kinds of government chosen?

In the sixth grade, when we come to study the central government of England at London, we shall find the most prominent object the Houses of Parliament on the Thames. An elegant picture of this building can be found in one of the geographies or in Shepp's photographs, and from a guide-book the ground plan of the building, show-

ing especially the House of Commons and the House of Lords, may be secured.

In the making of the laws the two houses correspond closely to our House of Representatives and Senate, and the general plan of the building, with a central hall and the two great chambers on opposite sides of it in the wings, is the same as that of the national capitol at Washington and of the state capitol building at Springfield, and of many other state capitols.

Upon inquiring into the manner of choosing the members of Parliament, the contrast between our Senate and the House of Lords appears. Our senators are chosen by the state legislatures, the lords are mostly hereditary in their rights. They are born lords, and with this is connected the right of primogeniture, long since abolished in this country.

On the executive side the prime minister and his cabinet correspond to our President and cabinet. Their duties in the main are similar. But at one corner of the Houses of Parliament is the great Victoria Tower, through which the Queen passes to the robing rooms. The mention of the Queen brings out with great pointedness the one marked contrast between our government and that of England. The Queen, or hereditary monarch, ruling by right of birth, is the social and political head of England, signs all laws as does our President, calls upon some one to form a ministry, etc.

The Supreme Court of England has in general the same functions as that body with us. The striking difference is the royal family. It may be well here to locate the Queen's palaces: St. James and Buckingham, near the Parliament houses in London; Balmoral, with its immense estates, in Scotland; Windsor, on the Thames above London, and Osborne House, on the Isle of Wight. Excellent pictures and descriptions of these are given in Shepp's photographs.

All these, like her queenly power, are held by hereditary right by the Queen, and the expense of keeping up these establishments and the other palaces and the income of the royal family may be referred to. The great lords of England, with their castles and large landed or city estates, rest upon the same basis of primogeniture and heredity as the Queen.

As we pass later to the treatment of the government of other states in Europe, we shall find this fundamental comparison with our familiar government at Washington the essential basis of interpretation. In France we find a republic.

In Germany, at Berlin, not the Reichstag and Herrenhaus are the main objects of interest, but the palace of the Emperor, the old princely Schloss, and the institutions of royalty. The Emperor, or Kaiser, plays a much more significant rôle than the Queen or than our President. Germany is still largely ruled by its princes, though the power of the legislature is steadily growing. Moreover, the army behind the Emperor is much more necessary, and is more completely under the control of one man, than in England, to say nothing of the United States. The situation of Germany, surrounded by powerful and jealous enemies, is favorable to royal power and the maintenance of a splendid army.

When we come to Russia, the significance of arbitrary power is made striking and prominent by the absence of a legislature in which the people are represented and share in law-making. The concentration of executive, legislative, and judicial power in one man furnishes the most striking contrast to our system of government; and now, by comparing the governments of the United States, England, Germany, and Russia, we are able to mark out the steps that show the different grades in all governments.

In the natural course of geographical studies we shall have occasion thus to deal definitely six or seven times with government as a topic. Can there remain any doubt that the method of comparison by which the later forms of Europe and Asia are compared step by step with our own government and with each other is the proper manner of treatment? The best review of our own government is this detailed comparison of what has been learned of our own with the similar and yet different forms of England, Germany, and Russia.

A SERIES OF STUDIES ON DESERTS.

THE GREAT BASIN OF UTAH AND NEVADA.

1. Between the Rocky Mountains of Colorado on the east and the Sierra Nevada of California on the west lies a region of desert wastes, salt lakes, and plateaus cut up by short mountain chains, whose drainage has no outlet to the sea. It is a broken plateau between 4,000 and 5,000 feet above the sea level, and is a little larger than France.

On the south lies the plateau of the Colorado River with its deep cañons, separated by only a slight watershed from the great basin. On the north also the watershed between the Snake River and the great basin is irregular and difficult to determine.

This whole region is arid, having only a slight rainfall, owing to the high Sierra Nevada range, which intercepts the wet winds coming from the Pacific and causes their moisture to fall in rains and snows upon the western mountains. As these winds pass over to the plateau, they are mostly dry.

On the east, the great Rocky Mountain chain likewise takes most of the moisture from the winds from the Gulf of Mexico and the Mississippi valley.

In addition to these causes the plateau in summer time is hot, and the ascending column of hot air dissipates what clouds would be formed over the plateau. This is especially true in the southern part of the plateau and in the Colorado basin, so that refreshing showers are also cut off in that direction.

Such rains as do fall within the basin are mostly along the ridges of the higher mountain chains, such as the Wasatch and the eastern slopes of the Sierra Nevada, which also get a part of the snows and rains from the Pacific. From these mountain slopes descend the streams which supply the salt lakes and sinks with water; e. g., Bear River and the Jordan, flowing into Salt Lake; the Truckee River, flowing into Pyramid and Winnemucca Lakes, near the Sierra Nevada; and the Humboldt, flowing into Humboldt and Carson Sinks; also the Sevier River and Lake.

Most of the lower mountain ridges crossing this plateau extend from north to south and are barren, rising precipitously in many places out of the plateau. In a few places they are cut through by rivers forming gorges through which the railroads pass from east to west, as, for example, along the Bear and Humboldt Rivers.

Several parts of this plateau are distinctly marked deserts, as is the large tract just west and southwest of Salt Lake, which was once a part of Salt Lake itself, when the water was more abundant and extended; also the Mohave Desert, with its dreary valley, partly below sea level (called Death Valley), in southeastern California. In the early caravandays to California the passage of the pioneers across the deserts of Utah was marked by great sufferings and losses.

Agriculture is possible only where the rivers can be used as irrigating streams, which is especially the case with those small rivers flowing into the Great Salt Lake. Irrigation, however, takes up so much of the river waters that the lakes receive but a small part and are much reduced in size. In the valleys where irrigating ditches can be used

the soil is productive. The natural rainfall is not sufficient to produce crops.

The vegetation of these plains or plateaus is very scanty; the sage brush (artemisia) and cacti do little to enliven the dismal appearance of these dusty plains, and in the salty and rocky deserts even these are not present.

In former geological ages these plateaus received more rain, the lakes were ten times as large as now and had outlets to the Snake River and Klamath on the north, whose old channels have been found. The old beach levels of Salt Lake are clearly traced on the neighboring mountains, 600 feet above the present water levels. The salt and soda beds of dried-up lakes are found as deserts where once stood the lakes.

The lakes, having no outlet to the sea, are intensely salt or alkaline. Great salt beds and soda beds are found in these desert plains.

Only the higher mountain slopes which border these plateaus and receive rains are covered with forests, especially of pine and other evergreen. On the eastern slopes of the Sierra Nevada are found oak and deciduous forests.

In the later study of Europe, Asia, South America, and Africa, we shall meet with arid tracts or deserts which remind us strongly of the conditions in the great basin of Utah and Nevada.

In the peninsula of Spain and Portugal we find a central plateau, bordered along the coasts by fruitful and well-watered lowlands or valleys. As the winds move toward central Spain, they drop their moisture on the fringing mountain slopes, so that the low plateau upon which Madrid is built is almost forbidding in its aridity.

In southern Russia and Siberia, in the depressions of the Caspian and Aral Seas, are found extensive salt deserts bordering these seas, proclaiming, as in the deserts about Salt Lake (only on a more extensive scale) the former wide extent of the Caspian. These salt plains about the Caspian are dreary desert wastes, hot and stifling in summer and bleak and cold in winter.

The great desert of Sahara, especially the western part, south of the Atlas Mountains, has some strong marks of resemblance to our western basin. The Atlas Mountains catch the moisture brought by the western winds from the Atlantic. The small streams flowing southward from the Atlas Mountains are lost in the sands of the Sahara, like those from the Sierra Nevada. At some points the desert is below the sea level and shows brackish and salt lakes.

The hot, blistering sands and rocks send up a column of heated air that dissipates any clouds that might bring rain to the desert. Only where mountain chains cross the desert, as the Hogar chain that separates the western Sahara from the Libyan wastes, is there rainfall. A part of the year these mountains are covered with snow, and streams descend from the melting snows and rains and are lost in the desert, creating oases, however, and fruitful tracts.

The only vegetation found in the deserts, apart from the oases, is the artemisia and thorny mimosas, corresponding to the cacti and sage brush of our western deserts. In the Sahara, also, irrigation from the short streams and from artesian wells is the source of the groves and fruits which mark the scattered oases.

The Sahara, like our western deserts, is not a level plateau, but while it averages about 2,000 feet above the sea, a small district south of Algeria is 165 feet below the level of the sea and is the bed of an ancient sait lake. To the south and east it rises into plateaus and mountains from 3.300 to 6,600 feet high. Many ranges of rocky ridges and mountains or sandhills traverse the desert, leaving deep valleys between, either the beds of ancient lakes or rivers.

Lying farther south than our desert tract, it is much hotter, and the vegetation of its oases is tropical: date palm, orange, and tropical fruits.

The Sahara, the greatest of all deserts, is about 3,100 miles from east to west and on the average 600 miles wide, about two-thirds of the size of Europe, but nearly a third of this vast district is occupied by the oases.

But the Sahara is only one of a great series of deserts extending across Asia and Africa. Arabia, especially in its southern part, is one plateau desert with smaller wastes to the north. It is really a continuation of the Sahara, only slightly interrupted by the narrow strip of the Nile and by the expanse of the Red Sea.

Still farther to the northeast, "The principal part of the plateau of Iran, occupying a quadrilateral space, surrounded by mountains which stop the rains in their passage, consists of sterile solitudes, some covered with saline beds, the remains of dried-up lakes, others spread over with shifting sands, or dotted over with reddish-colored hills. It is continued toward the east by the deserts of Afghanistan and Beloochistan, which are not so large and much easier to travel over "(Reclus).

North of the Himalaya, after touching northwestern India, the great

chain of deserts, protected from the rain-bringing winds by the mass. ridges of mountains, extends across Tibet and Mongolia, "It eastern part of this belt is called according to the language Cobi & Chamo, that is to say, the desert par excellence, and from its enumed dimensions corresponds with the Sahara of Africa, situated exacts if the opposite extremity of the long chain of solitudes which strate right across the old world. The mirage, the moving sandhills blown ", into eddies, and many other phenomena described by African tracen are found in certain districts of the Cobi, just the same as in all one deserts. But the cold here is exceptionally intense, on account of the great height of the plateau, which is on an average 4,950 feet, and the vicinity of the plains of Siberia which are crossed by the plain wind. It freezes nearly every night and often during the day dryness of the atmosphere is extreme, there is hardly any vegetation and a few grassy hollows are the only oases of these regions. From Kiakhta to Pekin there are only five trees for a distance of 400 to 100 miles, which is the width of the desert in this part of Mongolia. The Cobi, however, like the Sahara, was formerly covered by the waters of the ocean; even on the elevated plateaux old cliffs may be noticed the bases of which are worn away by the waves, and long strands of rough shingle stretch around the area which was formerly occupied by a now vanished gulf" (Reclus).

This study of deserts and arid regions in America, Europe, Africa and Asia, thus briefly suggested, offers a series of widely separated, yet connected, lessons which should, in the course of geographical study, be brought together. Every time one of these topics relative to deserts comes up for full discussion, a set of comparisons should be instituted which will bring to clear remembrance the facts previously studied.

With the area, elevation, salt lakes and deserts, vegetation, mountains and irrigation of our great western desert basin as a standard of measurement we may estimate and compare the Sahara, Arabia, the salt steppes of Russia, and the desert of Cobi, and by striking resemblances and noticeable differences acquire a body of definite and well-organized knowledge of this large geographical topic.

Bound up with this treatment of arid regions and deserts are the subjects of irrigation, salt seas having no outlet, and caravan trade routes. Moreover, the subject of trade winds and mountain barriers, intercepting the moisture-laden winds, must be treated in this connec-

tion as chief causes in producing deserts. The peculiar life of the desert regions, the nomad and Bedouin tribes, the tent-dwellers, wandering from place to place in search of pastures, and the remarkably peculiar fauna and flora of these wastes, must be described in order to grasp the meaning of such lands which, in spite of their forbidding aspect, are still the homes of millions of men.

The relation of the deserts to the continents as a whole and to the equator, and their obstruction to commerce, worse than the hardships of high mountains or broad oceans, should be brought clearly into view

It is easy to see that an elaborate description of our great western basin, with pictures of its dreary wastes, its salt lakes and salt and alkali plains, its broken and desolate mountains, its dead seas and sinks, its cañons and gorges, its scanty and leafless vegetation, its small patches of irrigated gardens and fields, its shrunken and disappearing rivers, its scorching and glaring heat in summer, will form an excellent groundwork for the understanding of the larger desert plateaus of other continents; especially when the causes are traced to the bordering mountains which stand sentinel to check the rain-bearing winds, when the small populations and difficult trade routes are seen as the results of the surface, climate, and resources of the country thus situated.

It it possible in this way, by building up around these great central topics from year to year, to gather a well-organized body of knowledge. By constant comparison of new with old the essential facts come more clearly and prominently into view.

A SERIES OF STUDIES ON TRADE CENTERS.

REVIEW BY COMPARISON.

In the fourth grade the children have a study of Minneapolis as a trade center for lumber from the pineries of the North, for wheat and other grain from the West, and for manufactured products brought from the East, which are distributed from Minneapolis and St. Paul as centers of the wholesale trade. The water power at Minneapolis is especially important for the flour mills. The river trade finds its terminus at St. Paul. The railroad and water routes from the twin cities via Duluth and Chicago carry the staple products, especially flour, to New York and Liverpool and other parts of Europe. This topic is fully worked out in the fourth grade.

When, later, the same year, Pittsburg is studied, they will compare the advantages of the two cities. Pittsburg is the center for the great iron and steel mills of western Pennsylvania. The iron is obtained from the mountains, and the coal along the valleys of the Monongahela and other streams furnishes fuel for the furnaces. Northward from Pittsburg lie the oil regions which supply Pittsburg with another raw material for its refineries. The glass factories, requiring other raw materials, are also very important at Pittsburg.

The Ohio River supplies an excellent means of cheap transportation for the coal, oil, iron products, glass, etc., of Pittsburg. A comparison of Pittsburg and its surrounding cities with Minneapolis and St. Paul will bring out the striking points in each case more clearly.

- 1. As centers for raw products to be manufactured into higher forms. Minneapolis: logs, wheat, and grain. Pittsburg: iron, coal, petroleum, and sand for glass. Pittsburg also receives some lumber, which comes down from the mountains via the Alleghany and Monongahela Rivers. Both Pittsburg and St. Paul are at the head of steamboat navigation; and yet, in both cases, the upper rivers are used for small steamboats—for coal barges and rafts on the Monongahela, and for lumber rafts and rafting steamers on the upper Mississippi.
- 2. Manufactured products. For Minneapolis and St. Paul, flour. lumber, barrels, furniture, agricultural implements, and some lesser ones, as boots and shoes. Pittsburg: steel rails, armor plates, pig iron, illuminating oil, benzine, vaseline, glassware, lumber, coke, etc.
- 3. The trade facilities by railroad and by river. Notice on a railroad map the important railroads centering in each of these cities; for example, the Pennsylvania Central at Pittsburg; the Chicago, Milwaukee & St. Paul at St. Paul and Minneapolis.
- 4. Both sites of these cities are historically interesting; Fort Du Quesne, changed afterward to Fort Pitt, being the most interesting historical point in the Ohio valley; Fort Snelling, at the junction of the Mississippi and Minnesota Rivers, is of special importance in the history of the Northwest.
- 5. Compare the population of Minneapolis and St. Paul with that of Pittsburg and Allegheny and the adjacent towns:

			1895				1895
Minneapolis,	-	-	192,833	Pittsburg,	-	-	238,617
St. Paul, -	-	-	140,292	Allegheny,	-	-	105,287
			333,125				343,904

A similar comparison may be made with Albany and Troy at the head of navigation on the Hudson. Albany is important—

- 1. On account of the commerce along the Erie Canal and the great railroad traffic from Buffalo to Albany and New York.
- 2. The canal connecting Lake Champlain with the upper Hudson brings the lumber of the North in large quantity to Albany.

Pittsburg also has a canal connection with Lake Erie by way of Beaver River to Erie. Albany and St. Paul are capitals of the states and the head of navigation of rivers. The population of Albany is 94,923, and of Troy 60,956. The railroad from Albany to Boston passes through the Hoosac tunnel, one of the great engineering feats. The railroad from Pittsburg to Philadelphia crosses the Alleghany Mountains through fine mountain scenery.

When we come to Europe, we shall find some other cities located like Minneapolis and St. Paul, Pittsburg and Albany, at the head of steamboat navigation of important rivers, e. g., Lyons in southeastern France, at the junction of the Rhone and Saone Rivers. Lyons is located like Pittsburg, partly on the low plain between the two rivers, and partly on the hills back of it. It is the natural outlet for the trade from Switzerland, coming from Geneva, down the valley of the Rhone, and also for the commerce with the north of France, via the Saone River, whose upper waters are connected by canal with the Seine and with the Rhine. One of the great railroads of France runs from Paris to Lyons and Marseilles. Lyons draws the raw materials for its great manufacture of silk goods from its own neighborhood. The river furnishes excellent shipping facilities toward the south via Marseilles to the Mediterranean countries. The population of Lyons in 1896 was 466,028. Lyons is also a fortified city, having a circuit of defenses extending thirteen miles from the city. It has always been for 2,000 years a great center of trade up and down the Rhone and Saone valleys.

The points of similarity between Pittsburg and Lyons are quite noticeable, including its location on the flat land at the junction of the two rivers; its excellent commercial outlet down the river; its canals and slack-water navigation in the upper streams; its military importance; its manufactories. Compare also with London, Bordeaux, Hamburg, and Budapest.

One of the important topics for study in the United States geography is the Hudson River, and in Europe, also, the Rhine forms an equally important subject. After they have both been studied, a com-

parison as follows will form such a review as will be interesting and thought-producing:

- 1. Their commercial importance. In both cases these two rivers are great traffic routes, first by water, and second by rail. Important railroad lines run through both the valleys. The Hudson has three important canals connecting it with Lake Champlain and the St. Law rence, with Lake Erie and the West, and with the coal regions of northwestern Pennsylvania. The Rhine also has three canals connecting its upper waters with the Danube and the Rhone and the Seine The Rhine has always been the great central traffic route between northern Europe and southern or southeastern Europe. The Hudson with the Mohawk is the great traffic route between the lake states of the Northwest and New York.
- 2. The cities. The number of large cities on the Rhine, as Rotterdam, Cologne, Frankfurt, Strassburg, Basel, Zürich, etc., is greater than on the Hudson, but New York and Brooklyn, on account of their site and commercial importance, would surpass all the cities of the Rhine. In extent the Rhine is 800 miles long, the Hudson 300, but the Hudson is a much larger and deeper river than the Rhine. This is due to the fact that the valley of the Hudson is a drowned valley, the sea having flowed in and filled it up with the sinking of the coast lands. The Rhine, on the other hand, is a delta river which has built up out of the sea a large area of low land in Holland. In this respect, therefore, they are opposites. The navigable portion of the Rhine is much longer. The Rhine is navigable below the falls of Schaffhausen, although that part of the river flowing through the broad valley from Strassburg to Mayence is obstructed with shallows. The upper Hudson also has shallows.
- 3. In point of scenery the Rhine and the Hudson both have great attractions; the Palisades, the Highlands, and the Catskills furnish even more grand and impressive sights than the Rhine between Cologne and Bingen. But ancient castles and churches are not reproduced on the Hudson. Both rivers rise in the mountains, the Alps being much the higher. The Rhine springs from the foot of glaciers, the Hudson from deep lakes of the Adirondacks.
- 4. Both rivers are famous in history. The Rhine was crossed by Cæsar, Charlemagne, Louis XIV, Napoleon I, and William I of Germany. The Rhine, being on the boundary line between France and Germany, has been the scene of many great military campaigns. Its

chief cities, Cologne, Coblenz, Mayence, and Strassburg, are strongly fortified. The Hudson also, during the French and Indian wars and the Revolution, had great military importance.

5. Both rivers also have an important place in literature. Irving with his legends has made the valley of the Hudson famous. And the old Indian stories furnish still other legendary material. The Rhine has been famous in song and story for thousands of years. The Nibelungen song belongs mainly to this valley. Both Goethe and Schiller, greatest of German poets, were born and raised in this valley.

Such comparison as this brings into distinct prominence the points both of likeness and of difference. If these points are stated in the form of questions, the children will solve many problems of interest, and will learn to measure and to estimate and organize their knowledge. Later in the geographical studies of the children they may have occasion to compare the Danube, the Po, the Indus, and other rivers with the Rhine and the Hudson. In the same way, on a larger scale, the Mississippi River with its tributaries will offer a standard with which to compare the other great rivers of the world, as the Volga, the Yangtse, the Nile, the Congo, and the Amazon. The different functions and characters of great river valleys will thus be brought out with distinctness.

In a similar way a study of Pikes Peak and the surrounding mountains as illustrating the Rocky-Mountain system may be compared with Mt. Blanc and the Alps, Mt. Everest and the Himalayas, and Chimborazo and the Andes.

If the gold and silver mines of Colorado have been studied by the children, they should be first compared with the other gold-bearing districts in our own country—California, Nevada, Montana, and the Klondike—and afterward in the course of study with the mines in South Africa, Australia, and Russia. This will bring the knowledge of the whole subject of gold- and silver-mining into a certain completeness and unity.

The National Herbart Society.

PLAN AND PURPOSE.

The National Herbart Society was established for the purpose of securing a scientific study and discussion of leading problems in public education. It has thus far published four Yearbooks with their Supplements, and has contributed largely to deepen the knowledge and interest of teachers in important questions.

It is the purpose of this society to secure the ablest treatment of these topics in the Yearbooks, and a free and full discussion of them from every important standpoint. A Yearbook is published and distributed to the members in June of each year, about a month before the meeting of the National Educational Association. A Supplement is also published and sent to the members before the meeting of the Department of Superintendence in February of each year.

Four Yearbooks with their Supplements have already been published.

CONDITIONS FOR MEMBERSHIP.

The society desires the regular membership of all teachers and others who are interested in the questions discussed. Membership costs one dollar per year for each person, and entitles the member to one Yearbook and Supplement. Previous Yearbooks and Supplements may be had at the same rate.

LOCAL CLUBS.

Many local Herbart Clubs have been formed throughout the United States for the study and discussion of the Yearbooks and Supplements.

Where a local club of four or more persons is organized, the fee for each person is 75 cents per year. In such cases the organizer of the club will remit the fees to the Secretary and receive the Yearbooks for distribution. Such a club usually holds regular meetings for the discussion of the Yearbooks or other literature recommended by the society. Those desiring membership, singly or in clubs, should address

CHARLES A. MCMURRY,
University of Chicago, Chicago, Illinois.



THE

FIFTH YEARBOOK

OF THE

NATIONAL HERBART SOCIETY

FOR THE SCIENTIFIC STUDY OF TEACHING

PREPARED FOR DISCUSSION AT THE LOS ANGELES MEETING OF THE NATIONAL EDUCATIONAL ASSOCIATION, 3:00 F.M., YULY 10 AND 13

EDITED BY
CHARLES A. McMURRY
THE UNIVERSITY OF CHICAGO

1899

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THE FIFTH YEARBOOK of the National Herbart Society contains papers on The Significance of the Frontier in American History, on Mediæval and Modern History in the High School, and on The Social End of Education.

These papers will be freely discussed at the two sessions of the Herbart Society, to be held at Los Angeles on the afternoons of Wednesday and Thursday, July 12 and 13, at three o'clock.

The members of the Society and all those interested in these papers should read them carefully before going to the Los Angeles meeting of the N. E. A.

It is suggested that local clubs arrange one or two meetings in June for the reading and discussion of this Yearbook.

Many teachers have inquired about some definite course of readings in the pedagogy of Herbart.

Such a Course of Study is carefully outlined with book-references at the close of this Yearbook. A statement is also given of the organization of the Herbart Society and of the terms of membership singly and in clubs.

The Yearbooks may be ordered of the Secretary.

CHARLES A. MCMURRY.

THE UNIVERSITY OF CHICAGO, Chicago, Ill.

THE EXECUTIVE COUNCIL

OF THE NATIONAL HERBART SOCIETY.

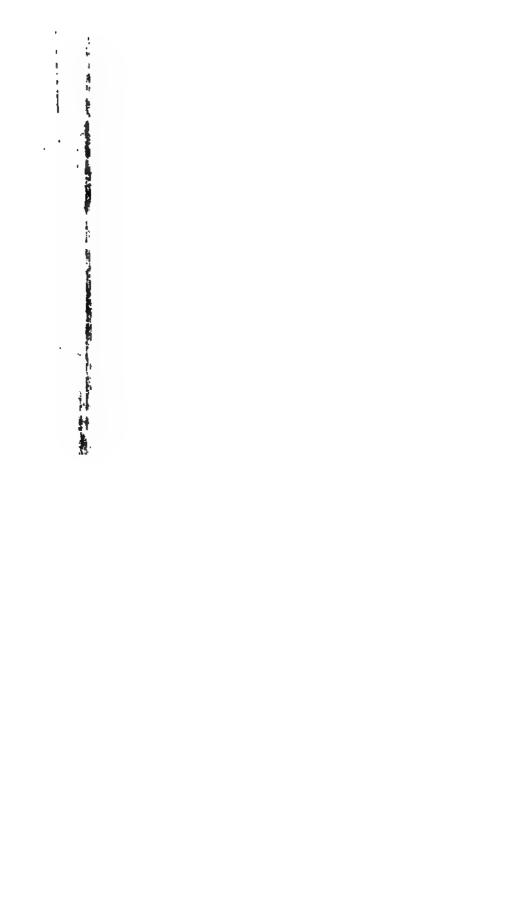
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Two meetings for the discussion of the Fifth Yearbook will be held at the University of Chicago, Thursday, July 6, 1899, afternoon and evening, directed by Charles A, McMurry.

A meeting will be held also at Cornell University for this purpose August 11, directed by Charles DeGarmo.



THE FIFTH YEARBOOK

THE SIGNIFICANCE OF THE FRONTIER IN AMERICAN HISTORY.

By FREDERICK J. TURNER, Professor of American History in the University of Wisconsin.

"He shall desire loneliness, and his desire shall bring
Hard on his heels a thousand wheels, a people and a king,
He shall come back on his own track, and by his scarce cool camp,
There he shall meet the roaring street, the detrick and the stamp;
For he must blaze a nation's way, with hatchet and with brand
Till on his last won wilderness an empire's bulwarks stand."

RUDYARD KIPLING, The Foreloper.

"We cannot look on the freedom of this country, in connection with its youth, without a presentiment that here shall laws and institutions exist on some scale of proportion to the majesty of nature. To men legislating for the area betwixt the two oceans, betwixt the snows and the tropics, somewhat of the grandeur of nature will infuse itself into the code. It seems so easy for America to inspire and express the most expansive and humane spirit; new-born, free, healthful, strong, the land of the laborer, of the democrat, of the philanthropist, of the believer, of the saint, she should speak for the human race. It is the country of the future. From Washington, proverbially the city of magnificent distances, through all its cities, states and territories, it is a country of beginnings, of projects, of designs, and expectations. We in the Atlantic states, by position have been commercial and have, as I have said, imbibed easily an European culture. Luckily for us, now that steam has narrowed the Atlantic to a strait, the nervous rocky West is intruding a new and continental element into the national mind, and we shall yet have an American genius."

EMERSON, Young American (1844).

SUGGESTIONS TO TEACHERS.

This essay is reprinted and enlarged at the desire of Professor DeGarmo, who assures me that it may be helpful to teachers of American history. If it achieves any such success, it will be principally by

This paper is slightly modified and enlarged from the form in which it appeared in the Annual Report of the American Historical Association for 1893, pp. 199-227.

suggesting a new point of view from which to approach that study. The practical adaptation of the doctrine to secondary school instruction must be left largely to the teacher, but the following suggestions may be of assistance.

- t. Place before the student a large physiographic map of the United States, free from political or social data. The best for this purpose is the three-sheet contour map of the United States (in blue and brown only) published for its own use by the United States Geological Survey.
- 2. Make use of Powell's "Physiographic Regions," in the Physical graphy of the United States published by the American Book Company
- 3. Have the student indicate on an outline map the location of the frontier line at successive census periods, as shown in the Eleventh Census Report, in the volume on Population, and in the Statistical Atlas of the United States, Eleventh Census. Outline maps for this purpose can be obtained from D. C. Heath & Co., from Rand, McNally & Co., and better yet, from the United States Geological Survey (United States Contour Map, 18 × 23, single copies ten cents; one hundred or more at the rate of four dollars a hundred).
- 4. Raise the question in connection with each important event in American history, "how was this related to the western expansion of settlement?" or "how did it affect this expansion?" The teacher will be surprised to see the new light cast upon events by this simple enquiry.
- 5 The maps may be made useful also by such devices as indicating by separate colors the states which were carried by the rival political parties at the various presidential elections. The expansive character and sectionalism of political parties will thus appear.
- 6. By indicating the new cities as they are established, the student will learn the physiographic and commercial forces that determined their location and development. Much economic history can be made to center about this exercise.
- 7. The important roads, canals, and railroads may be added as they were constructed, and the result may be compared with physiographic conditions, and with the maps showing the location of population. In locating the railroads, Scribner's Statistical Atlas will be helpful.
- 8. The gradual extinction of the Indian title may be shown and related to the various political boundaries of the territories and new states, and also compared with the maps showing the distribution of

population. The annexations of territory can be considered in the same way. For this, use Gannett's Boundaries of the United States (Bulletin of the United States Geological Survey No. 13) and the Eighteenth Annual Report of the Bureau of Ethnology.

9. The teacher can interest and instruct the pupils by selecting certain western leaders, like Jackson, Clay, Harrison, Cass, Lincoln, Douglas, Houston, Chase, Sherman, Grant, Jefferson Davis, McKinley and Bryan, and noting the successive migrations of their ancestors, as illustrations of the westward movement of rival sections, and of the western modifications of the migrating stock.

10. Particular topics, like slavery, the tariff, suffrage, internal improvements, the currency and banking, the land policy, diplomacy, etc., should be examined with reference to the influence upon them of these facts of expanding settlement.

These suggestions are merely illustrative. By approaching American history from its western side, as well as from its seaboard side, a fresh and stimulating view will be gained, and above all the sociological interpretation will be facilitated. The history of the United States finds its chief claim to attention in its value as a field for the scientific study of social development. The spread of settled society into these continental wastes, and the free development of a democracy in relation to unoccupied lands, constitute the peculiar features of our national life.' Henry Adams has well said:

Should history ever become a true science, it must expect to establish its laws, not from the complicated story of European nationalities, but from the methodical evolution of a great democracy. North America was the most favorable field on the globe for the spread of a society so large, uniform, and isolated as to answer the purposes of science.

INTRODUCTION.

In a bulletin of the Superintendent of the Census for 1890 appear these significant words: "Up to and including 1880 the country had a frontier of settlement, but at present the unsettled area has been so broken into by isolated bodies of settlement that there can hardly be said to be a frontier line. In the discussion of its extent, its westward movement, etc., it cannot, therefore, any longer have a place in the census reports." This brief official statement marks the closing of a great historic movement. Up to our own day American history has

*See the author's paper on "The West as a Field for Historical Study," in the Report of the American Historical Association for 1896, p. 284.

been in a large degree the history of the colonization of the West The existence of an area of free land, its continuous recession, and the advance of American settlement westward, explain American development

Behind institutions, behind constitutional forms and modifications lie the vital forces that call these organs into life and shape them to meet changing conditions. The peculiarity of American institutions is, the fact that they have been compelled to adapt themselves to the changes of an expanding people - to the changes involved in crossing a continent, in winning a wildernsss, and in developing at each area of this progress out of the primitive economic and political conditions of the frontier into the complexity of city life. Said Calhoun in 1817. "We are great, and rapidly — I was about to say fearfully — growing "" So saying, he touched the distinguishing feature of American life All people show development; the germ theory of politics has been sufficiently emphasized. In the case of most nations, however, the development has occurred in a limited area; and if the nation has expanded, it has met other growing peoples whom it has conquered. But in the case of the United States we have a different phenomenon Limiting our attention to the Atlantic coast, we have the familiar phenomenon of the evolution of institutions in a limited area, such as the rise of representative government; the differentiation of simple colonial governments into complex organs; the progress from primitive industrial society, without division of labor, up to manufacturing civilization. But we have in addition to this a recurrence of the process of evolution in each western area reached in the process of expansion. Thus American development has exhibited not merely advance along a single line, but a return to primitive conditions on a continually advancing frontier line, and a new development for that area. American social development has been continually beginning over again on the frontier. This perennial rebirth, this fluidity of American life, this expansion westward with its new opportunities, its continuous touch with the simplicity of primitive society, furnish the forces dominating American character. The true point of view in the history of this nation is not the Atlantic coast, it is the great West. Even the slavery struggle, which is made so exclusive an object of attention by some historians, occupies its important place in American history because of its relation to westward expansion.

^{*} Abridgment of Debates, V. 706.

In this advance, the frontier is the outer edge of the wave—the meeting point between savagery and civilization. Much has been written about the frontier from the point of view of border warfare and the chase, but as a field for the serious study of the economist and the historian it has been neglected.

The American frontier is sharply distinguished from the European frontier—a fortified boundary line running through dense populations. The most significant thing about the American frontier is, that it has at the hither edge of free land. In the census reports it is treated as the margin of that settlement which has a density of two or more to the square mile. The term is an elastic one, and for our purposes does not need sharp definition. We shall consider the whole frontier belt, including the Indian country and the outer margin of the "settled area" of the census reports. This paper will make no attempt to treat the subject exhaustively; its aim is simply to call attention to the frontier as a fertile field for investigation, and to suggest some of the problems which arise in connection with it.

In the settlement of America we have to observe how European 1 life entered the continent, and how America modified and developed that life and reacted on Europe. Our early history is the history of European germs developing in an American environment. Too exclusive attention has been paid by institutional students to the Germanic origins, too little to the American factors. The frontier is the line of most rapid and effective Americanization. The wilderness masters the colonist. It finds him a European in dress, industries, tools, modes of travel, and thought. It takes him from the railroad car and puts him in the birch canoe. It strips off the garments of civilization and arrays him in the hunting shirt and moccasin. It puts him in the log cabin of the Cherokee and Iroquois and runs an Indian palisade around him. Before long he has gone to planting Indian corn and plowing with a sharp stick; he shouts the war cry and takes the scalp in orthodox Indian fashion. In short, at the frontier the environment is at first too strong for the man. He must accept the conditions which it furnishes, or perish, and so he fits himself into the Indian clearings and follows the Indian trails. Little by little he transforms the wilderness, but the outcome is not the old Europe, not simply the development of Germanic germs, any more than the first phenomenon was a case of reversion to the Germanic mark. The fact is, that here is a new product that is American. At first, the frontier was the Atlantic coast. It was

the frontier of Europe in a very real sense. Moving westward, the frontier became more and more American. As successive terminal moraines result from successive glaciations, so each frontier leaves its traces behind it, and when it becomes a settled area the region still partakes of the frontier characteristics. Thus the advance of the frontier has meant a steady movement away from the influence of Europe, a steady growth of independence on American lines. And to study this advance, the men who grew up under these conditions, and the political, economic, and social results of it, is to study the peculiarly American part of our history.

Let us then grasp the conception of American society steaddy expanding into new areas. How important it becomes to watch the stages, the processes and the results of this advance. The conception will be found to revolutionize our study of American history.

STAGES OF FRONTIER ADVANCE.

In the Report on Population of the United States at the Eletenth Census, Part I, the student will find a series of maps representing the advance of population at each census period since 1790. By a consideration of these maps in connection with a relief map of the United States, and with the Reconnoissance Map of the United States showing the distribution of the geologic system (Fourteenth Annual Report of the United States Geological Survey, plate ii.), and with the Contour Map of the United States (in blue and brown only, without culture data, published by the United States Geological Survey), it will become plain that for an adequate comprehension of the course of American history, it is necessary to study the process by which the advancing flood of settlement flowed into the successive physiographic areas. We must observe also how these areas affected the life of the emigrants from the older sections and from Europe.

When one examines these census maps by the side of Major Powell's map showing the physiographic regions of the United States, he comprehends the fact that there are American sections, neither defined by state lines, nor by the old divisions of New England, middle region, south and west; he perceives that, in some respects, the map of the United States may be likened to the map of Europe; that the great physiographic provinces which have been won by civilization are economically and socially comparable to nations of the old world. The

^{*} Physiography of the United States, pp. 98-99 (American Book Company).

study of the stages of frontier advance thus becomes the fascinating examination of the successive evolution of peculiar economic and social countries, or provinces, each with its own inheritance, its own contributions, and individuality.

Such a study of the moving frontier will show how, after the tidewater section was settled below the fall line in the seventeenth century, a combined stream along the Great Valley and up the southern rivers that drain into the Atlantic, filled in the Piedmont region. This process occupied the first half of the eighteenth century. In the same period settlement was ascending the Connecticut and the Housatonic, in New England; and the Mohawk, in New York. These river valleys walled by the mountains and enriched with fluvial soils, became the outlet for increasing population, and they directed the flow of settlement. Thus two rival currents of settlement were already started by the middle of the eighteenth century. New England's stream was almost pure native stock. The stream that followed the Great Valley and occupied the Piedmont was dominantly Scotch-Irish and German.

In vain the king attempted to check this advance by his proclamation of 1763, forbidding settlements beyond the sources of the Atlantic rivers. Just before the Revolution, settlement reached and followed the "Western Waters" (the streams that, rising near the sources of the Atlantic rivers, cut their way through the mountains to join the Ohio). The limestone soils, so welcome to the farmer, were influential in determining this advance. The limestone belt that floors the northern part of the Great Valley in Pennsylvania, Maryland, and Virginia had tempted settlers along its path and into the Piedmont. The limestone flooring of the Tennessee Valley now attracted settlers to eastern Tennessee. Thence, by Cumberland Gap, or down the Ohio from the north, the flood poured into the limestone areas of Kentucky and Tennessee, known as the Blue Grass lands.

By the close of the Revolution, settlement in Kentucky and Tennessee was almost coterminous with the limestone termations, as may be seen by comparing the map of the census of 1790 with the map showing the distribution of the geologic system of the United States.

^{&#}x27;See POWELL'S Physiography of the United States, pp. 73-74.

On this movement see ROOSEVELT, Winning of the West: WINSOR, Mississippi Bassa; and WINSOR, Westward Movement See also accounts of travelers, as cited in Report of American Historical Association for 1803, p. 203, and in Channing and Ilaet, Guide to American History, pp. 78-86,

These outlying islands of settlement, separated by wilderness and mountains from the frontier border of the settled area of the coast, had important effects upon American diplomatic, military, and economic history. In the Revolutionary era the frontier communities beyond the mountains attempted to establish states of their own, on democratic lines.* The West as a self-conscious section began to evolve,* and the struggle for the navigation of the Mississippi accented this western individualism, and made doubtful the unity of America.

By diplomacy, and by Indian wars and cessions, gradually the way was opened for the spread of settlement into western New York, and into the country north of the Ohio. New England's Connecticut Valley and Housatonic Valley settlers, overflowing their confines, poured into central and western New York between 1788 and 1820, and New England also began to settle in Ohio. The middle states and the South sent their current of settlement into the southern part of the Northwest,3 while settlement followed the victories of Andrew Jackson into the Southwest after the War of 1812.

By the census of 1820 the settled area included Ohio, southern Indiana and Illinois, southeastern Missouri, and about one half of Louisiana. This settled area had surrounded Indian areas, and the management of these tribes became an object of political concern. The frontier region of the time lay along the Great Lakes, where Astor's American Fur Company operated in the Indian trade, and beyond the Mississippi, where Indian traders extended their activity even to the Rocky Mountains; Florida also furnished frontier conditions. The Mississippi River region was the scene of typical frontier settlements. The era of internal improvements, and protective tariffunder the home market idea opened. Its explanation is to be sought in the distribution of settlement.

- ⁴See the paper on Western State-Making in the Revolutionary Era (American Historical Review, vol. 1, 70, 251), ALDEN, New Governments West of the Alleghanics before 1780 (Bulletin of the University of Wiscomum).
 - *Compare Atlantic Monthly, September 1896, vol Ixxviii, p. 289.
- 3 Atlantic Monthly, April 1897, vol. IXXIX, pp 374 et 2007; ROOSEVELT, Winning of the West, vol. iv; Thorpe, Constitutional History of the People of the United States, DWIGHT, Travels (1796-1815), New Haven, 1821.
- ⁴TI RNER, Character and Influence of the Indian Trade in Wisconsin (Johns Hepkins University Studies, Series ix), pp. 61 ft.
- 5 MONETTE, History of the Mississippi Valley, vol. ii; FLINT, Travels and Reindense in Mississippi; FLINT, Geography and History of the Western States; Abradgment of

The rising steam navigation* on western waters, the opening of the Erie Canal, and the westward extension of cotton* culture added five frontier states to the Union in this period. Grund, writing in 1836, declares: "It appears then that the universal disposition of Americans to emigrate to the western wilderness, in order to enlarge their dominion over inanimate nature, is the actual result of an expansive power which is inherent in them, and which by continually agitating all classes of society is constantly throwing a large portion of the whole population on the extreme confines of the state, in order to gain space for its development. Hardly is a new state or territory formed before the same principle manifests itself again and gives rise to a further emigration; and so it is destined to go on until a physical barrier must finally obstruct its progress."

It was in the period between 1820 and 1850 that the forces were at work which differentiated the northwestern frontier and the southwestern frontier. In the Southwest the spread of cotton culture transformed the pioneer farmer into the great planter and slaveholder. In the Northwest, the New England and middle state stream, followed by German immigration, took possession of the Great Lake basin, and the pioneer farmer type was continued. This section was united to New York by the Erie Canal and by the later railroads. New Orleans ceased to be the outlet of the Northwest. Thus the physiographic province included in the glaciated area embracing the Great Lake basin and New England plateau was brought, by the flow of frontier settlement, into economic, political, and social unity. In the same

Debates of Congress, vii, pp. 397, 398, 304; Holmes, Account of the United States; Kingdom, America and the British Colonies (London, 1820); Grund, Americans, vol. is, chs. i, ii, vi (although writing in 1836, he treats of conditions that grew out of western advance from the era of 1820 to that time); Peck, Guide for Emigrants (Boston, 1831); Darby, Emigrants Guide to Western and Southwestern States and Territories; Darba, Geographical Sketches in the Western Country; Kinzie, Waubun; Keating, Narrative of Long's Expedition; Schoolcraft, Discovery of the Sources of the Missistippi River, Travels in the Central Portions of the Missisppi Valley, and Lead Mines of the Missispi Moses, History of Illinois; Hurlbut, Chicago Antiquities; McKenney, Tour to the Lakes; Thomas, Travels Through the Western Country, etc. (Auburn, N. Y., 1819).

^{*}Darby, Emigrants' Guide, pp. 272 ff.; Benton, Abridgment of Debates, vol. vii, p. 397.

^{*} De Bow's Review, vol. iv, p. 254; vol. xvii, p. 428.

GRUND, Americans, vol. it, p. 8.

period the physiographic province of the Gulf Plains was settled and unified by extensions of the coastal south, under the temptations of the cotton lands. The struggle for Texas and the Mexican War were late sequences of this movement.

Prior to this, the Mississippi Valley had possessed a considerable degree of social and political homogeneity. By the processes just mentioned, however, the sectional division of North and South was carried beyond the Alleghanies, and the western spirit gave to the political and economic antagonisms between the old North and South sections a new rancor and aggressiveness. Both were regions of action and they furnished the radical leaders for their respective sections in the struggle that followed.

In the middle of this century the line indicated by the present eastern boundary of Indian Territory, Nebraska, and Kansas marked the frontier of the Indian country. Minnesota and Wisconsin still exhibited frontier conditions but the distinctive frontier of the period is found in California, where the gold discoveries had sent a sudden tide of adventurous miners, and in Oregon, and the settlements in Utah. As the frontier had leaped over the Alleghanies, so now it skipped the Great Plains and the Rocky Mountains; and in the same way that the advance of the frontiersmen beyond the Alleghanies had caused the nee of important questions of transportation and internal improvement, so now the settlers beyond the Rocky Mountains needed means of

PECK, New Guide to the West (Cincinnati, 1848) ch. iv; PARKMAN, Oregon Treal HAIL, The West (Cincinnati, 1848), Pierce, Incidents of Western Travel; MURAAT Travels in North America. LLOYD, Steamboat Directory (Cincinnati, 1856); "Fosty Pars in a Western Hotel" (Chicago), in Pulnam's Magasine, December 1894; Machai, The Western World, vol. ii, chs. ii, iii; Meeker, Life in the West; Bogen, German in America, (Boston, 1851); Olmstead, Texas Journey; Greeley, Recollections of a Busy Life Schouler, History of the United States, vol. v, 261-267; Peyton, Over the Alleghanics and Across the Prairies (London, 1870); Inman, Sunta Fé Trail: Peyton, Suggestions in Railroad Communication with the Pacific and the Tradeof China and the Indian Junial, Benton, Highway to the Pacific (a speech in the U.S. Senate, December 16, 1850)

^a A writer in *The Home Missionary* (1850), p. 239, reporting Wisconsin conductors, exclaims: "Think of this, people of the enlightened East. What an example, to come from the very frontiers of civilization!" But one of the missionaries writes: "In a few years Wisconsin will no longer be considered as the West, or as an outpost of civilization, any more than western New York, or the Western Reserve."

BANCROFT (H. H.) History of the Pacific States: and Popular Testamels HITTELL, California; Shinn, Mining Camps; Shinn, Story of the Mine: Century Magazine, 1890, 1891. communication with the East, and in the furnishing of these arose the settlement of the Great Plains and the development of still another kind of frontier life. Railroads, fostered by land grants, sent an increasing tide of immigrants into the far West. The United States Army' fought a series of Indian wars in Minnesota, Dakota, and the Indian Territory; cessions made way for settlement.

By 1880 the settled area had been pushed into northern Michigan, Wisconsin, and Minnesota, along Dakota rivers, and in the Black Hills region, and was ascending the rivers of Kansas and Nebraska. The development of mines in Colorado had drawn isolated frontier settle ments into that region, and Montana and Idaho were receiving settlers. The frontier was found in these mining camps and the ranches of the Great Plains. The superintendent of the census for 1890 reports as previously stated, that the settlements of the West lie so scattered over the region, that there can no longer be said to be a frontier line.

It will be noted that the frontier boundaries are physiographically significant. The fall line marked the seventeenth-century frontier; the Alleghany Mountains, that of the middle of the eighteenth century, the Mississippi, that of the last decade of the eighteenth century, and, in part, that of the first quarter of the present century. Settlement that had crept up the Missouri, the Platte, etc., by the middle of the nineteenth century stayed while the rush of gold seekers made a new frontier on the Pacific coast and in the Rocky Mountains. The boundary of the and region (roughly the hundredth meridian) marks the most recent frontier. The conquest of the and West will be by different processes than that of the other areas of western advance, and a different social type may be looked for in the region.

Each great western advance, thus outlined, has been accompanied by a diplomatic or military struggle against rival nations, and by a series of Indian wars and cessions.

THE FRONTIER FURNISHES A FIELD FOR COMPARATIVE STUDY OF SOCIAL DEVELOPMENT.

At the Atlantic frontier one can study the germs of processes repeated at each successive frontier. We have the complex European life sharply precipitated by the wilderness into the simplicity of primitive conditions. The first frontier had to meet its Indian question, its

^{*}RODENBOUGH and HASKIN, Army of the United States.

See Atlantic Monthly, vol. Ixxix, p. 440.

question of the disposition of the public domain, of the means of intercourse with older settlements, of the extension of political organization,
of religious and educational activity. And the settlement of these and
similar questions for one frontier served as a guide for the next. The
American student needs not to go to the "prim little townships of Sleswick" for illustrations of the law of continuity and development. For
example, he may study the origin of our land policies in the colonial
land policy; he may see how the system grew by adapting the statutes
to the customs of the successive frontiers. He may see how the mining
experience in the lead regions of Wisconsin, Illinois, and Iowa was
applied to the mining laws of the Rockies, and how our Indian policy
has been a series of experimentations on successive frontiers. Each tier
of new states has found in the older ones material for its constitution.
Each frontier has made similar contributions to American character, as
will be discussed farther on.

But with all these similarities there are essential differences, due to the place element and the time element. It is evident that the farming frontier of the Mississippi Valley presents different conditions from the mining frontier of the Rocky Mountains. The frontier reached by the Pacific Railroad, surveyed into rectangles, guarded by the United States Army, and recruited by the daily immigrant ship, moves forward in a different way and at a swifter pace than the frontier reached by the birch canoe or the pack horse. The geologist traces patiently the shores of ancient seas, maps their areas, and compares the older and the newer. It would be a work worth the historian's labors to mark these various frontiers, and in detail compare one with another. Not only would there result a more adequate conception of American development and characteristics, but invaluable additions would be made to the history of society.

Loria, the Italian economist, has urged the study of colonial life as an aid in understanding the stages of European development, affirming that colonial settlement is for economic science what the mountain is for geology, bringing to light primitive stratifications. "America," he says, "has the key to the historical enigma which Europe has sought

¹ See the suggestive paper by PROFESSOR JESSE MACY, The Institutional Beginnings of a Western State,

^{*} SHINN, Mining Camps.

³ Compare Thorre, in Annals American Academy of Political and Social Science, September 1891; BRYCE, American Commonwealth (1888), vol. 11, p. 689.

LORIA, Analisi della Proprieta Capitalista, vol. 11, p. 15.

for centuries in vain, and the land which has no history reveals luminously the course of universal history." There is much truth in this. The United States lies like a huge page in the history of society. Line by line, as we read this continental page from west to east, we find the' record of social evolution. It begins with the Indian and the hunter; it goes on to tell of the disintegration of savagery by the entrance of the trader, the pathfinder of civilization; we read the annals of the pastoral stage in ranch life, the exploitation of the soil by the raising of unrotated crops of corn and wheat in sparsely settled farming communities; the intensive culture of the denser farm settlement; and finally, the manufacturing organization with city and factory system.' This page is familiar to the student of census statistics, but how little of it has been used by our historians. Particularly in eastern states this page is a palimpsest. What is now a manufacturing state was in an earlier decade an area of intensive farming. Earlier yet it had been a wheat area, and still earlier the "range" had attracted the cattle herder. Thus Wisconsin, now developing manufacture, is a state with varied agricultural interests. But earlier it was given over to almost exclusive grain-raising, like North Dakota at the present time.

Each of these areas has had an influence in our economic and political history; the evolution of each into a different industrial stage has worked political transformations. Wisconsin, to take an illustration, in the days when it lacked varied agriculture and complex industrial life, was a stronghold of the granger and greenback movements; but it has undergone an industrial transformation, and in the last presidential contest Mr. Bryan carried but one county in the state. Again consider the history of Calhoun. His father came with the tide of Scotch-Irish pioneers that built their log cabins in the Piedmont region of the Carolinas. The young manhood of Calhoun was thoroughly western in its nationalistic, and loose construction characteristics. But the extension of cotton culture to the Piedmont, following the industrial revolution in England, superseded the pioneer by the slave holding planter. Calhoun's ideas changed with his section, until he became the chief prophet of southern sectionalism and slavery.

^{*}Compare Observations on the North American Land Company, London, 1796, pp. 18, 144; Logan, History of Upper South Carolina, vol. 1, pp. 149-151; Tunneu, Character and Influence of Indian Trade in Wisconsin, p. 18; Peck, New Guide for Emigranti (Boston, 1837), ch. 1v; Comfendium, Eleventh Census, vol. 1, p. xl

^{*}See page 34 pout for other illustrations, and compare Atlantic Monthly, April 1897, vol. lxxix, pp 441-443

Among isolated coves in the Appalachian Mountains, and a other out-of-the-way places, the frontier has survived, like a fossil, in a more recent social formation. The primitive economic conditions of these mountains of Tennessee, or of Georgia, for instance, enable us to comprehend some of the characteristics of the frontier of earlier days. In the American Journal of Sociology for July 1898, under the title "A Retarded Frontier," Professor Vincent has described such a community.

The Atlantic frontier was compounded of fisherman, fur-trader miner, cattle-raiser and farmer. Excepting the fisherman, each type of industry was on the march toward the west, drawn by an irrestible attraction. Each passed in successive waves across the continent. Stand at Cumberland Gap and watch the procession of civilization. marching single file-the buffalo following the trail to the salt springs the Indian, the fur-trader and hunter, the cattle-raiser, the pioneer farmer - and the frontier has passed by. Stand at South Pass in the Rockies a century later and see the same procession with wider inter vals between. The unequal rate of advance compels us to distinguish the frontier into the trader's frontier, the rancher's frontier, or the miner's frontier, and the farmer's frontier. When the mines and the cow pens were still near the fall line the trader's pack trains were tinkling across the Alleghanies, and the French on the Great Lakes were fortifying their posts, alarmed by the British trader's birch cance When the trappers scaled the Rockies, the farmer was still near the mouth of the Missouri.

THE INDIAN TRADER'S FRONTIER.

Why was it that the Indian trader passed so rapidly across the continent? What effects followed from the trader's frontier? The trade was coeval with American discovery. The Norsemen, Vespuccias, Verrazani, Hudson, John Smith, all trafficked for furs. The Plymonth pilgrims settled in Indian cornfields, and their first return cargo was of beaver and lumber. The records of the various New England colon is show how steadily exploration was carried into the wilderness by the trade. What is true for New England is, as would be expected, even plainer for the rest of the colonies. All along the coast from Maine to Georgia the Indian trade opened up the river courses. Steadily the trader passed westward, utilizing the older lines of French trade. The

Ohio, the Great Lakes, the Mississippi, the Missouri, and the Platte, the lines of western advance, were ascended by traders. They found the passes in the Rocky Mountains and guided Lewis and Clark, Fremont, and Bidwell. The explanation of the rapidity of this advance is connected with the effects of the trader on the Indian. The trading post left the unarmed tribes at the mercy of those that had purchased fire-arms - a truth which the Iroquois Indians wrote in blood, and so the remote and unvisited tribes gave eager welcome to the trader. "The savages," wrote La Salle, "take better care of us French than of their own children; from us only can they get guns and goods." This accounts for the trader's power and the rapidity of his advance. Thus the disintegrating forces of civilization entered the wilderness. Every river valley and Indian trail became a fissure in Indian society, and so that society become honeycombed. Long before the pioneer farmer appeared on the scene, primitive Indian life had passed away. The farmers met Indians armed with guns. The trading frontier, while steadily undermining Indian power by making the tribes ultimately dependent on the whites, yet, through its sale of guns, gave to the Indians increased power of resistance to the farming frontier. French colonization was dominated by its trading frontier, English colonization by its farming frontier. There was an antagonism between the two frontiers as between the two nations. Said Duquesne to the Iroquois, "Are you ignorant of the difference between the king of England and the king of France? Go see the forts that our king has established and you will see that you can still hunt under their very walls. They have been placed for your advantage in places which you frequent. The English, on the contrary, are no sooner in possession of a place than the game is driven away. The forest falls before them as they advance, and the soil is laid bare so that you can scarce find the wherewithal to erect a shelter for the night."

And yet, in spite of this opposition of the interests of the trader and the farmer, the Indian trade pioneered the way for civilization. The buffalo trail became the Indian trail, and this became the trader's "trace;" the trails widened into roads, and the roads into turnpikes, and these in turn were transformed into railroads. The same origin can be shown for important railroads of the South, the far West, and

But Lewis and Clark were the first to explore the route from the Missouri to the the Columbia.

the Dominion of Canada.' The trading posts reached by these trails were on the sites of Indian villages which had been placed in positions suggested by nature; and these trading posts, situated so as to command the water systems of the country, have grown into such cities as Albany, Pittsburg, Detroit, Chicago, St. Louis, Council Bluffs, and Kansas City. Thus civilization in America has followed the arteries made by geology, pouring an ever richer tide through them, until at last the slender paths of aboriginal intercourse have been broadened and interwoven into the complex mazes of modern commercial lines; the wilderness has been interpenetrated by lines of civilization growing ever more numerous. It is like the steady growth of a complex nervous system for the originally simple, inert continent. If one would understand why we are today one nation, rather than a collection of isolated states, he must study this economic and social consolidation of the country. In this progress from savage conditions he topics for the evolutionist."

The effect of the Indian frontier as a consolidating agent in our history is important. From the close of the seventeenth century various intercolonial congresses have been called to treat with Indians and establish common measures of defense. Particularism was strongest in colonies with no Indian frontier. This frontier stretched along the western border like a cord of union. The Indian was a common danger, demanding united action. Most celebrated of these conferences was the Albany congress of 1754, called to treat with the Six Nations, and to consider plans of union. Even a cursory reading of the plan proposed by the congress reveals the importance of the frontier. The powers of the general council and the officers were, chiefly, the determination of peace and war with the Indians, the regulation of Indian trade, the purchase of Indian lands, and the creation and government of new settlements as a security against the Indians. It is evident that the unifying tendencies of the Revolutionary period were facilitated by the previous cooperation in the regulation of the frontier. In this connection may be mentioned the importance of the

'The later railroads frequently deviated in important respects from the exact line of the old trails; but the statement is true in general. See Narrative and Critical History of America, vol. viii, p. 10; SPARKS, Washington's Works, vol. ix, pp. 303, 327; LOGAN, History of Upper South Carolina, vol. i; McDONALD, Life of Kenton, p. 72.

On the effect of the fur trade in opening the routes of migration, see the author's Character and Influence of the Indian Trade in Wisconsin.

Indian frontier in the modification of western institutions and character, and particularly, as a military training school, keeping alive the power of resistance to aggression, and developing the stalwart and rugged qualities of the frontiersman. If the reader will compare the names of the officers whose exploits at Santiago and at Manila are now in everybody's mouth, with the names of the officers in the Indian fighting of the United States, he will understand better the importance of this aspect of the frontier.

THE RANCHER'S FRONTIER.

It would not be possible in the limits of this paper to trace the other frontiers across the continent. At the close of the seventeenth century in Virginia we find vast droves of wild horses and cattle, with typical ranch life and customs. Similar conditions existed in other parts of the coast area.* Travelers of the eighteenth century found the "cow-pens" among the canebrakes and pea-vine pastures of the South, and the "cow drivers" took their droves to Charleston, Philadelphia, and New York.3 Travelers at the close of the War of 1812 met droves of more than a thousand cattle and swine from the interior of Ohio going to Pennsylvania to fatten for the Philadelphia market.* The ranges of the Great Plains, with ranch and cowboy and nomadic life, are things of yesterday and of today.5 The experience of the Carolina cow-pens guided the ranchers of Texas. One element favoring the rapid extension of the rancher's frontier is the fact that in a remote country lacking transportation facilities the product must be in small bulk, or must be able to transport itself, and the cattle raiser could easily drive his product to market. The effect of these great ranches on the subsequent agrarian history of the localities in which they existed should be studied.

*Colonel Leonard Wood, for example, in the Geronimo campaign, under Lawton in 1886, added to his duties as surgeon, the command of the infantry. Compare The Century, July 1891, p. 309, and Sectioner's, January 1899, pp. 3-20.

*Compare Bruce, Economic History of Virginia in the Seventeenth Century, vol. i, 473 477, 540; Weeden, Economic and Social History of New England, vol. 1, 100, 128, Doyle, Puritan Colonies, vol. 11, 19-23, 46-47.

³ Lodge, English Colonies, p. 152 and citations; Logan, History of Upper South Carolina, vol. 1, p. 151.

4 FLINT. Recollections, p 9.

See WISTER, "Evolution of the Cow Puncher," in Harper's Magasine, September 1895; HOUGH, Story of the Cow Boy, ROOSEVELT, Ranch Life and the Hunting Trail.

THE FARMER'S FRONTIER.

The maps of the census reports show an uneven advance of the farmer's frontier, with tongues of settlement pushed forward and with indentations of wilderness. In part this is due to Indian resistance, in part to the location of river valleys and passes, in part to the unequaliforce of the centers of frontier attraction. Among the important centers of attraction may be mentioned the following: fertile and favorably situated soils, salt springs, mines, and army posts.

ARMY POSTS.

The frontier army post, serving to protect the settlers from the Indians, has also acted as a wedge to open the Indian country, and has been a nucleus for settlement. In this connection mention should also be made of the government military and exploring expeditions in determining the lines of settlement. But all the more important expeditions were greatly indebted to the earliest pathmakers, the Indian guides, the traders and trappers, and the French voyageurs, who were inevitable parts of governmental expeditions from the days of Lewis and Clark. Each expedition was an epitome of the previous factors in western advance.

SALT SPRINGS.

In an interesting monograph, Victor Hehn's has traced the effect of salt upon early European development, and has pointed out how it affected the lines of settlement and the form of administration. A similar study might be made for the salt springs of the United States. The early settlers were tied to the coast by the need of salt, without which they could not preserve their meats or live in comfort. Writing in 1752, Bishop Spangenburg says of a colony for which he was seeking lands in North Carolina. "They will require salt & other necessaries which they can neither manufacture nor raise. Either they must go to Charleston, which is 300 miles distant.

Or else they must go to Boling's Point in Va on a branch of the James & is also 300 miles from here

Or else they must go down the Roanoke—I know not how many miles—where salt is brought up from

^{*}For example, see MONETTE, Mississippi Valley, vol. i, p. 344.

^{*} Cours, Lewis and Clark's Expedition, vol. 1, pp. 2, 253-259.

³ HEHN, Das Sala (Berlin, 1873).

the Cape Fear." This may serve as a typical illustration. An annual pilgrimage to the coast for salt thus became essential. Taking flocks or furs and ginseng root, the early settlers sent their pack trains after seeding time each year to the coast. This proved to be an important educational influence, since it was almost the only way in which the pioneer learned what was going on in the East. But when discovery was made of the salt springs of the Kanawha, and the Holston, and Kentucky, and central New York, the West began to be freed from dependence on the coast. It was in part the effect of finding these salt springs that enabled settlement to cross the mountains.

LAND.

The exploitation of the beasts took hunter and trader to the west, the exploitation of the grasses took the rancher west, and the exploitation of the virgin soil of the river valleys and prairies attracted the farmer. Good soils have been the most continuous attraction to the farmer's frontier. When the science of physiography is more completely related to the study of our history it will be seen how dependent that history was upon the forces that carved out the limestone valleys and deposited alluvial soils along the river courses. The land hunger of the Virginians drew them down the rivers into Carolina, in early colonial days; the pursuit of good soil took the Massachusetts men to Pennsylvania and to New York. As the eastern lands were taken up migration flowed across them to the west. Daniel Boone, the great backwoodsman, who combined the occupations of hunter, trader, cattleraiser, farmer, and surveyor-learning, probably from the traders, of the fertility of the lands on the upper Yadkin, where the traders were wont to rest as they took their way to the Indians, left his Pennsylvania home with his father, and passed down the Great Valley road to that stream. Learning from a trader whose posts were on the Red River in Kentucky of its game and rich pastures, he pioneered the way for the farmers to that region. Thence he passed to the frontier of Missouri, where his settlement was long a landmark on the frontier. Here again he helped to open the way for civilization, finding salt-

^{*} Colonial Records of North Carolina, vol. v. p. 3.

^{*}FINDLEY, History of the Insurrection in the Four Western Counties of Pennsylvania in the Year 1794 (Philadelphia, 1796), p. 35.

See also MCGEE's paper on potable springs, as affecting settlement, in the Fourteenth Annual Report of the United States Geological Survey, Part II, p. 9.

licks, and trails, and land. His son was among the earliest trappers in the passes of the Rocky Mountains, and his party is said to have been the first to camp on the present site of Denver. His grandson, Colonel A. J. Boone, of Colorado, was a power among the Indians of the Rocky Mountains, and was appointed an agent by the government. Kit Carson's mother was a Boone. Thus this family epitomizes the backwoodsman's advance across the continent.

The farmer's advance came in a distinct senes of waves. In Peck's New Guide to the West, published in Boston in 1837, occurs this suggestive passage:

Generally, in all the western settlements, three classes, like the waves of the ocean, have rolled one after the other. First comes the pioneer, who depends for the subsistence of his family chiefly upon the natural growth of vegetation, called the "range," and the proceeds of hunting. His implements of agriculture are rude, chiefly of his own make, and his efforts directed mainly to a crop of corn and a "truck patch." The last is a rude garden for growing cabbage, beans, corn for roasting ears, cucumbers, and potatoes. A log cabin, and, occasionally, a stable and com-crib, and a field of a dozen acres, the timber girdled or "deadened," and fenced, are enough for his occupancy. It is quite immaterial whether he ever becomes the owner of the soil. He is the occupant for the time being, pays no rent, and feels as independent as the "lord of the manor." With a horse, cow, and one or two breeders of swine, he strikes into the woods with his family, and becomes the founder of a new county, or perhaps state. He builds his cabin, gathers around him a few other families of similar tastes and habits, and occupies until the range is somewhat subdued, and hunting a little precarious, or, which is more frequently the case, till the neighbors crowd around, roads, bridges, and fields annoy him, and he lacks elbow room. The preemption law enables him to dispose of his cabin and cornfield to the next class of emigrants; and, to employ his own figures, he "breaks for the high timber," "clears out for the New Purchase," or migrates to Arkansas or Texas, to work the same process over.

The next class of emigrants purchase the lands, add field to field, clear out the roads, throw rough bridges over the streams, put up hewn log houses with glass windows and brick or stone chimneys, occasionally plant orchards, build mills, schoolhouses, courthouses, etc., and exhibit the picture and forms of plain, frugal, civilized life.

Another wave rolls on. The men of capital and enterprise come. The settler is ready to sell out and take the advantage of the rise in property, push farther into the interior and become, himself, a man of capital and

^{*} HALE, Daniel Boone (pamphlet).

enterprise in turn. The small village rises to a spacious town or city; substantial edifices of brick, extensive fields, orchards, gardens, colleges, and churches are seen. Broadcloths, silks, leghorns, crapes, and all the refinements, luxuries, elegancies, frivolities, and fash ons are in vogue. Thus wave after wave is rolling westward; the real Eldorado is still further on.

A portion of the two first classes remain stationary amidst the general movement, improve their habits and condition, and rise in the scale of society.

The writer has traveled much amongst the first class, the real pioneers. He has lived many years in connection with second grade; and now the third wave is sweeping over large districts of Indiana, Illinois, and Missouri. Migration has become almost a habit in the West. Hundreds of men can be found, not over fifty years of age, who have settled for the fourth, fifth, or sixth time on a new spot. To sell out and remove only a few hundred miles makes up a portion of the variety of backwoods life and manners.

Omitting those of the pioneer farmers who move from the love of adventure, the advance of the more steady farmer is easy to understand. Obviously the immigrant was attracted by the cheap lands of the frontier, and even the native farmer felt their influence strongly. Year by year the farmers who lived on soil whose returns were diminished by unrotated crops were offered the virgin soil of the frontier at nominal prices. Their growing families demanded more lands, and these were dear. The competition of the unexhausted, cheap, and easily tilled prairie lands compelled the farmer either to go West and continue the exhaustion of the soil on a new frontier, or to adopt intensive culture. Thus the census of 1890 shows, in the Northwest, many counties in which there is an absolute or a relative decrease of population. These states have been sending farmers to advance the frontier on the plains, and have themselves begun to turn to intensive farming and to manufacture. A decade before this, Ohio had shown the same transition stage. The demand for land and the love of wilderness freedom drew the frontier ever onward. The sectional aspects of the agricultural frontier demand historical study. The United States Department of Agriculture has published two Bulletins (Nos. 10 and

*Compare Baily, Tour in the Unsettled Parts of North America (London, 1856), pp. 217-219, where a similar analysis is made for 1796. See also Collot, Journey in North America (Paris, 1826), p. 109; Observations on the North American Land Company (London, 1796) pp. xv, 144; Lugan, History of Upper South Carolina; Murat, Moral and Political Stetch of the United States (London, 1833) (also under the title America and Americans, New York, 1849); Dwight, Travels, vol. 11, p. 459; vol. 11, p. 32; Roosevelt, Winning of the West, vol. 11, chap. v.

the Life Zones and Crop Zones of the United States, and the Geographic Distribution of Cereals in North America. The census volume on agriculture contains other maps showing the distribution of various crops and products. As the farmer's frontier advanced westward is reached and traversed these natural physiographic areas. The history of the farmer's frontier is in part a history of the struggle between these natural conditions and the custom of the farmer to raise the crops and use the methods of the other regions which he has left. The tragedy of the occupation of the and tract, where the optimism of the pioneer farmer met its first rude rebuff by nature itself, is a case in point.

Having now roughly outlined the various kinds of frontiers, and their modes of advance, chiefly from the point of view of the frontier itself, we next inquire what were the influences on the East and on the Old World. A rapid enumeration of some of the more noteworthy effects is all that I have space for.

COMPOSITE NATIONALITY.

First, we note that the frontier promoted the formation of a composite nationality for the American people. The coast was preponderantly English, but the later tides of continental immigration flowed across to the free lands. This was the case from the early colonal days. The Scotch-Irish and the Palatine-Germans, or "Pennsylvania Dutch," furnished the dominant element in the stock of the colonial frontier. With these peoples were also the freed indented servants, or redemptioners, who, at the expiration of their time of service, passed to the frontier. Governor Spotswood, of Virginia, writes, in 1717. "The inhabitants of our frontiers are composed generally of such as have been transported bother as servants, and, being out of their time, settle themselves where land is to be taken up and that will produce the necessarys of life with little labour." Very generally these redemptioners were of non-English stock. In the crucible of the frontier the iminigrants were Americanized, liberated, and fused into a mixed race. English in neither nationality nor characteristics. The process has gone on from the early days to our own. Burke and other writers in the middle of the eighteenth century believed that Pennsylvania was

^{&#}x27;Spotswood Papers," in Collections of Virginia Historical Society, vols. i. ii.

BURKE, European Settlements, etc. (1765 ed.), vol. u, p. 200.

"threatened with the danger of being wholly foreign in language, manners, and perhaps even inclinations." The German and Scotch-Irish elements in the frontier of the South were only less great. In the middle of the present century the German element in Wisconsin was already so considerable that leading publicists looked to the creation of a German state out of the commonwealth by concentrating their colonization. By the census of 1890 South Dakota had a percentage of persons of foreign parentage to total population of sixty; Wisconsin, seventy-three; Minnesota, seventy-five; and North Dakota, seventy-nine. Such examples teach us to beware of misinterpreting the fact that there is a common English speech in America into a belief that the stock is also English.

INDUSTRIAL INDEPENDENCE.

In another way the advance of the frontier decreased our dependence on England. The coast, particularly of the South, lacked diversified industries, and was dependent on England for the bulk of its supplies. In the South there was even a dependence on the northern colonies for articles of food. Governor Glenn, of South Carolina, writes in the middle of the eighteenth century: "Our trade with New York and Philadelphia was of this sort, draining us of all the little money and bills we could gather from other places for their bread, flour, beer, hams, bacon, and other things of their product, all which, except beer, our new townships began to supply us with, which are settled with very industrious and thriving Germans. This no doubt diminishes the number of shipping and the appearance of our trade, but it is far from being a detriment to us." Before long the frontier created a demand for merchants. . As it retreated from the coast it became less and less possible for England to bring her supplies directly to the consumer's wharfs, and carry away staple crops, and staple crops began to give way to diversified agriculture for a time. The effect of this phase of the frontier action upon the northern section is perceived when we realize how the advance of the frontier aroused seaboard cities like Boston, New York, and Baltimore, to engage in rivalry for what Washington called "the extensive and valuable trade of a rising empire."

EVEREST, in Wiscomin Historical Collections, vol xii, pp. 7 ff.

[&]quot;WESTON, Documents connected with History of South Carolina, p. 61.

EFFECTS ON NATIONAL LEGISLATION

The legislation which most developed the power government, and played the largest part in its activit on the frontier. Writers have discussed the subjects internal improvement as subsidiary to the slavery qu American history comes to be rightly viewed it will slavery question is an incident. In the period from t half of the present century to the close of the Civil V primary, but far from exclusive, importance. But th Dr. von Holst (to take an example) in treating our tory in its formative period down to 1828 in a sing six volumes chiefly to the history of slavery from 18 the title "Constitutional History of the United Stat of nationalism and the evolution of American powere dependent on the advance of the frontier. writer as Rhodes, in his history of the United States mise of 1850, has treated the legislation called of advance as incidental to the slavery struggle.

This is a wrong perspective. The proneer neede coast, and so the grand series of internal improven legislation began, with potent nationalizing effect improvements occurred great debates, in which gr questions were discussed. Sectional groupings ap profoundly significant for the historian. Loose cons as the nation marched westward. But the West was bringing the farm to the factory. Under the lead of the West"—protective tariffs were passed, with the factory to the farm. The disposition of the p third important subject of national legislation i frontier.

EFFECTS ON INSTITUTIONS.

It is hardly necessary to do more than mention West was a field in which new political institutions value of the second transfer of the s

¹ Compare I.IRBY, "Plea for the Study of Votes in Congress can Historical Association for 1896, p. 223; BURGESS, Middle Pe

"See, for example, the speech of CLAY, in the House of Re 30, 1824.

of western institutions shows how slight was the proportion of actual theoretic invention of institutions; but there is abundance of opportunity for study of the sources of the institutions actually chosen, the causes of the selection, the degree of transformation by the new conditions, and the new institutions actually produced by the new environment.

THE PUBLIC DOMAIN.

The public domain has been a force of profound importance in the nationalization and development of the government. The effects of the struggle of the landed and the landless states, and of the ordinance of 1787, need no discussion.' Administratively the frontier called out some of the highest and most vitalizing activities of the general government. The purchase of Louisiana was perhaps the constitutional turning point in the history of the Republic, masmuch as it afforded both a new area for national legislation and the occasion of the downfail of the policy of strict construction. But the purchase of Louisiana was called out by frontier needs and demands. As frontier states accrued to the Union the national power grew. In a speech on the dedication of the Calhoun monument, Mr. Lamar explained: "In 1789 the states were the creators of the federal government; in 1861 the federal government was the creator of a large majority of the states."

When we consider the public domain from the point of view of the sale and disposal of the public lands, we are again brought face to face with the frontier. The policy of the United States in dealing with its lands is in sharp contrast with the European system of scientific administration. Efforts to make this domain a source of revenue, and to withhold it from emigrants in order that settlement might be compact, were in vain. The jealousy and the fears of the East were powerless in the face of the demands of the frontiersmen. John Quincy Adains was obliged to confess: "My own system of administration, which was to make the national domain the inexhaustible fund for progressive and unceasing internal improvement, has failed." The reason is obvious; a system of administration was not what the West demanded; it

^{&#}x27;See the admirable monograph by PROFESSOR H B. ADAMS, Maryland's Influence on the Land Cestions; and also PRESIDENT WELLING, in Papers American Historical Association, vol. in, p. 411; BARRETT, Evolution of the Ordinance of 1787.

^{*} SANBURN, Congressional Land Grants in Aid of Railroads (Bulletin of University of Wisconsin); DONALDSON, Public Domain.

wanted land. Adams states the situation as follows: "The stave holders of the South have bought the cooperation of the western country by the bribe of the western lands, abandoning to the new west ern states their own proportion of the public property and aiding the in the design of grasping all the lands into their own hands. Then a H. Benton was the author of this system, which he brought forwart a substitute for the American system of Mr. Clay, and to supplant has as the leading statesman of the West. Mr. Clay, by his tariff compress mise with Mr. Calhoun, abandoned his own American system. At "6 same time he brought forward a plan for distributing among all the states of the Union the proceeds of the sales of the public lands. 113 bill for that purpose passed both houses of Congress, but was vetoed : * President Jackson, who, in his annual message of December 18;2 formally recommended that all public lands should be gratu.to.sly given away to individual adventurers and to the states in which the lands are situated."

"No subject," said Henry Clay, "which has presented itself to the present, or perhaps any preceding, Congress, is of greater magnitude than that of the public lands." When we consider the far-reaching effects of the government's land policy upon political, economic, and social aspects of American life, we are disposed to agree with him. Rut this legislation was framed under frontier influences, and under the lead of western statesmen like Benton and Jackson. Said Senator Scott, of Indiana, in 1841: "I consider the preemption law merely declaratory of the custom or common law of the settlers."

NATIONAL TENDENCIES OF THE FRONTIER.

It is safe so say that the legislation with regard to land, tariff, and internal improvements—the American system of the nationalizing Whig party—was conditioned on frontier ideas and needs. But it was not merely in legislative action that the frontier worked against the sectionalism of the coast. The economic and social characterstics of the frontier worked against sectionalism. The men of the frontier had closer resemblances to the middle region than to either the other sections. Pennsylvania had been the seed-plot of southern frontier emigration, and, although she passed on her settlers along the Great Valley into the west of Virginia and the Carolinas, yet the industrial society of these southern frontiersmen was always more like

^{*} J. Q. Adams, Memoirs, vol. ix, pp. 247, 248.

that of the middle region than like that of the tide-water portion of the South, which later came to spread its industrial type throughout the South.

The middle region, entered by New York harbor, was an open door to all Europe. The tide-water part of the South represented typical Englishmen, modified by a warm climate and servile labor, and living in baronial fashion on great plantations; New England stood for a special English movement - Puritanism. The middle region was less English than the other sections. It had a wide mixture of nationalities, a varied society, the mixed town and county system of local government, a varied economic life, many religious sects. In short, it was a region mediating between New England and the South, and the East and the West. It represented that composite nationality which the contemporary United States exhibits, that juxtaposition of non-English groups, occupying a valley or a little settlement, and presenting reflections of the map of Europe in their variety. It was democratic and nonsectional, if not national; "easy, tolerant, and contented;" rooted strongly in material prosperity. It was typical of the modern United States. It was least sectional, not only because it lay between North and South, but also because with no barriers to shut out its frontiers from its settled region, and with a system of connecting waterways, the middle region mediated between East and West as well as between North and South. Thus it became the typically American region. Even the New Englander, who was shut out from the frontier by the middle region, tarrying in New York or Pennsylvania on his westward march, lost the acuteness of his sectionalism on the way."

Moreover, it must be recalled that the western and central New England settler who furnished the western movement was not the typical tide-water New Englander; he was less conservative and contented, more democratic and restless.

The spread of cotton culture into the interior of the South finally broke down the contrast between the "tide-water" region and the rest of the South, and based southern interests on slavery. Before this process revealed its results, the western portion of the South, which was akin to Pennsylvania in stock, society, and industry, showed tendencies to fall away from the faith of the fathers into internal improvement legislation and nationalism. In the Virginia convention of 1829-30,

Author's article in The Ægis (Madison, Wis.), November 4, 1892, and Atlantic Monthly, September 1896, p. 294, and April 1897, pp. 436, 441, 442.

called to revise the constitution, Mr. Leigh, of Chesterfield, one of the tide-water counties, declared:

One of the main causes of discontent which led to this convention, that which had the strongest influence in overcoming our veneration for the work of our fathers, which taught us to contemn the sentiments of Henry and Mason and Pendleton, which weaned us from our reverence for the constituted authorities of the state, was an overweening passion for internal improvement. I say this with perfect knowledge, for it has been avowed to me by gentlemen from the West over and over again. And let me tell the gentleman from Albeitarle (Mr. Gordon) that it has been another principal object of those who set this ball of revolution in motion, to overturn the doctrine of state rights, of which Virginia has been the very pillar, and to remove the barrier she has interposed to the interference of the federal government in that same work of internal improvement, by so reorganizing the legislature that Virginia, too, may be hitched to the federal car.

It was this nationalizing tendency of the West that transformed the democracy of Jefferson into the national republicanism of Monroe and the democracy of Andrew Jackson. The West of the War of 1812, the West of Clay, and Benton, and Harrison, and Andrew Jackson; shut off by the Middle States and the mountains from the coast sections. had a solidarity of its own with national tendencies.2 On the tide of the Father of Waters, North and South met and mingled into a nation. Interstate migration went steadily on - a process of cross-fertilization of ideas and institutions. The fierce struggle of the sections over slavery on the western frontier does not diminish the truth of this statement; it proves the truth of it. Slavery was a sectional trait that would not down, but in the West it could not remain sectional. It was the greatest of frontiersmen who declared: "I believe this government cannot endure permanently half slave and half free. It will become all of one thing or all of the other." Nothing works for nationalism like intercourse within the nation. Mobility of population is death to localism, and the western frontier worked irresistibly in unsettling population. The effects reached back from the frontier, and affected profoundly the Atlantic coast and even the Old World.

GROWTH OF DEMOCRACY.

But the most important effect of the frontier has been in the promotion of democracy here and in Europe. As has been indicated, the frontier is productive of individualism. Complex society is precipitated

^{*}Compare ROOSEVELT, Thomas Benton, chap. i.

by the wilderness into a kind of primitive organization based on the family. The tendency is anti-social. It produces antipathy to control, and particularly to any direct control. The tax-gatherer is viewed as a representative of oppression. Professor Osgood, in an able article, has pointed out that the frontier conditions prevalent in the colonies are important factors in the explanation of the American Revolution, where individual liberty was sometimes confused with absence of all effective government. The same conditions aid in explaining the difficulty of instituting a strong government in the period of the Confederacy. The frontier individualism has from the beginning promoted democracy.

The frontier states that came into the Union in the first quarter of a century of its existence came in with democratic suffrage provisions, and had reactive effects of the highest importance upon the older states whose peoples were being attracted there. An extension of the franchise became essential. It was western New York that forced an extension of suffrage in the constitutional convention of that state in 1821; and it was western Virginia that compelled the tide-water region to put a more liberal suffrage provision in the constitution framed in 1830, and to give to the frontier region a more nearly proportionate representation with the tide-water aristocracy. The rise of democracy as an effective force in the nation came in with western preponderance under Jackson and William Henry Harrison, and it meant the triumph of the frontier -- with all of its good and with all of its evil elements." An interesting illustration of the tone of frontier democracy in 1830 comes from the same debates in the Virginia convention already referred to. A representative from western Virginia declared:

But, sir, it is not the increase of population in the West which this gentleman ought to fear. It is the energy which the mountain breeze and western habits impart to those emigrants. They are regenerated, politically I mean, sir. They soon become working politicians; and the difference, sir, between a talking and a working politician is immease. The Old Dominion has long been celebrated for producing great orators; the ablest metaphysicians in policy; men that can split hairs in all abstruse questions of political economy. But at home, or when they return from Congress, they have negroes to fan them asleep. But a Pennsylvania, a New York, an Ohio, or a

^{*} Political Science Quarterly, vol. ii, p. 457. Compare Sumner, Alexander Hamilton, chaps. w. vo.

^{*}Compare Wilson, Divinon and Reunion, pp. 15, 24.

western Virginia statesman, though far inferior in logic, metaphysic and returns to an old Virginia statesman, has this advantage, that where returns bome he takes off his coat and takes hold of the plow. The him bone and muscle, sir, and preserves his republican principles pull an uncontaminated.

So long as free land exists, the opportunity for a comil or exists, and economic power secures political power. But the de internal born of free land, strong in selfishness and individualism, into vos administrative experience and education, and pressing individed. erty beyond its proper bounds, has its dangers as well as its bell ... Individualism in America has allowed a laxity in regard to go mental affairs which has rendered possible the spoils system and all me manifest evils that follow from the lack of a highly developed civit spirit. In this connection may be noted also the influence of fronter conditions in permitting inflated paper currency and wild-cat banking. The colonial and revolutionary frontier was the region whence emanated many of the worst forms of paper currency.' The West in the War of 1812 repeated the phenomenon on the frontier of that day, while the speculation and wild-cat banking of the period of the ensist of 1827 occurred on the new frontier belt of the next tier of states. Thus each one of the periods of paper money projects coincides with periods when a new set of frontier communities had arisen, and coincides in area with these successive frontiers, for the most part. The recent radical Populist agitation is a case in point. Many a state that now declines any connection with the tenets of the Populists, itselfadhered to such ideas in an earlier stage of the development of the state. A primitive society can hardly be expected to show the appreciation of the complexity of business interests in a developed society. The continual recurrence of these areas of paper-money agitation is another evidence that the frontier can be isolated and studied as a factor in American history of the highest importance.

ATTEMPTS TO CHECK AND REGULATE THE FRONTIER.

The East has always feared the result of an unregulated advance of the frontier, and has tried to check and guide it. The English authorities would have checked settlement at the headwaters of the Atlantic tributaries and allowed the "savages to enjoy their deserts in

² On the relation of frontier conditions to Revolutionary taxation, see Summer, Alexander Hamilton, chap. ini.

quiet lest the peltry trade should decrease." This called out Burke's splendid protest:

If you stopped your grants, what would be the consequence? The people would occupy without grants. They have already so occupied in many places. You cannot station garrisons in every part of these deserts. If you drive the people from one place, they will carry on their annual tillage and remove with their flocks and herds to another. Many of the people in the back settlements are already little attached to particular situations. Already they have topped the Appalachian Mountains. From thence they behold before them an immense plain, one vast, rich, level meadow; a square of five bundred miles. Over this they would wander without a possibility of restraint; they would change their manners with their habits of life; they would soon forget a government by which they were disowned; would become hordes of English Tartars; and, pouring down upon your unfortified frontiers a fierce and irresistible cavalry, become masters of your governors and your counselors, your collectors and comptrollers, and of all the slaves that adhered to them. Such would, and in no long time must, be the attempt to forbid as a crime and to suppress as an evil the command and blessing of Providence, "increase and multiply." Such would be the happy result of an endeavor to keep as a lair of wild beasts that earth which God, by an express charter, has given to the children of men,

But the English government was not alone in its desire to limit the advance of the frontier and guide its destinies. Tidewater Virginia and South Carolina gerrymandered those colonies to insure the dominance of the coast in their legislatures. Washington desired to settle a state at a time in the Northwest. In the constitutional convention of 1787, Gouverneur Morris declared that the western country would not be able to furnish men equally enlightened to share in the administration of our common interests. The busy haunts of men, not the remote wilderness, was the proper school of political talents. "If the western people get power into their hands, they will ruin the Atlantic interest. The back members are always most averse to the best measures." He desired, therefore, to fix such a rule of congressional representation that the Atlantic states could always outvote the western. Jefferson would reserve from settlement the territory of his Louisiana purchase

^{*} Debates in the Virginia Constitutional Convention, 1829-30.

^{*} CALHOUN, Works, Vol. 1, 401-406.

³ Elliof's Debates, vol. v, 298. Compare Josiah Quincy's outburst in the House of Representatives on the admission of Louisiana, January 14, 1811. (See JOHNSTON, American Orations, vol. 1, 145.

north of the thirty-second parallel, in order to offer it to the Indians in exchange for their settlements east of the Mississippi. "When we shall be full on this side," he writes, "we may lay off a range of states on the western bank from the head to the mouth, and so range after range. advancing compactly as we multiply." Madison went so far as to argue to the French minister that the United States had no interest in seeing population extend itself on the right bank of the Mississippi, but should rather fear it. When the Oregon question was under debate. in 1824, Smyth, of Virginia, would draw an unchangeable line for the limits of the United States at the outer limit of two tiers of states beyond the Mississippi, complaining that the seaboard states were being drained of the flower of their population by the bringing of too much land into market. Even Thomas Benton, the man of widest views of the destiny of the West, at this stage of his career, declared that along the ridge of the Rocky Mountains "the western himits of the republic should be drawn, and the statue of the fabled god Terminus should be raised upon its highest peak, never to be thrown down " But the attempts to limit the boundaries, to restrict land sales and settlement, and to deprive the West of its share of political power were all in vain. Steadily the frontier of settlement advanced and carried with it individualism, democracy, and nationalism, and powerfully affected the East and the Old World.

RELIGIOUS ORGANIZATION.

The most effective efforts of the East to regulate the frontier came through its educational and religious activity, exerted by interstate migration and by organized societies. Speaking, in 1835, Dr. Lyman Beecher declared: "It is equally plain that the religious and political destiny of our nation is to be decided in the West," and he pointed out that the population of the West "is assembled from all the states of the Union and from all the nations of Europe, and is rushing in like the waters of the flood, demanding for its moral preservation the immediate and universal action of those institutions which discipline the mind and arm the conscience and the heart. And so various are the opinions and habits, and so recent and imperfect is the acquaintance, and so sparse are the settlements of the West, that no homogeneous public sentiment can be formed to legislate immediately into being the requisite institutions. And yet they are all needed immediately in

^{*}Speech in the Senate, March 1, 1825; Register of Debates, vol. 1, 721.

their utmost perfection and power. A nation is being 'born in a day.'

But what will become of the West if her prosperity rushes up to such a majesty of power, while those great institutions linger which are necessary to form the mind and the conscience and the heart of that vast world. It must not be permitted. Let no man in the East quiet himself and dream of liberty, whatever may become of the West.

Her destiny is our destiny."

With the appeal to the conscience of New England, he adds appeals to her fears lest other religious sects anticipate her own. The New England preacher and the school-teacher left their mark on the West. The dread of western emancipation from New England's political and economic control was paralleled by her fears lest the West cut loose from her religion. Commenting, in 1850, on reports that settlement was rapidly extending northward in Wisconsin, the editor of the Home Missionary writes: "We scarcely know whether to rejoice or mourn over this extension of our settlements. While we sympathize in whatever tends to increase the physical resources and prosperity of our country, we cannot forget that with all these dispersions into remote and still remoter corners of the land the supply of the means of grace is becoming relatively less and less." Acting in accordance with such ideas, home missions were established and western colleges were erected. As seaboard cities like Philadelphia, New York, and Baltimore strove for the mastery of western trade, so the various denominations strove for the possession of the West. Thus an intellectual stream from New England sources fertilized the West. Other sections sent their missionaries; but the real struggle was between sects. The contest for power and the expansive tendency furnished to the various sects by the existence of a moving frontier had important results on the character of religious organization in the United States. The multiplication of rival churches in the little frontier towns had deep and lasting social effects. The effects of western freedom and newness in producing religious isms is noteworthy. Illustrations of this tendency may he seen in the development of the Millerites, Spiritualists, and Mormons of western New York in its frontier days. In general the religious aspects of the frontier deserved study.

INTELLECTUAL TRAITS.

From the conditions of frontier life came intellectual traits of profound importance. The works of travelers along each frontier from colonial days onward describe certain common traits, and these traits have, while softening down, still persisted as survivals in the place of their origin, even when a higher social organization succeeded. The result is that to the frontier the American intellect owes its striking characteristics. That coarseness and strength combined with acuteness and inquisitiveness; that practical, inventive turn of mind, quick to find expedients; that masterful grasp of material things, lacking in the artistic, but powerful to effect great ends; that restless, nervous energy;" that dominant individualism, working for good and for evil, and, withal, that buoyancy and exuberance which come with freedom these are traits of the frontier, or traits called out elsewhere because of the existence of the frontier. We are not easily aware of the deep influence of this individualistic way of thinking upon our present conditions. It persists in the midst of a society that has passed away from the conditions that occasioned it. It makes it difficult to secure social regulation of business enterprises that are essentially public; it is a stumbling-block in the way of civil service reform; it permeates our doctrines of education; but, with the passing of the free lands a vast extension of the social tendency may be expected in America.

Ratzel, the well-known geographer, has pointed out the fact that for centuries the great unoccupied area of America furnished to the American spirit something of its own largeness. It has given a largeness of design and an optimism to American thought. Since the days when the fleet of Columbus sailed into the waters of the New World, America has been another name for opportunity, and the people of the United States have taken their tone from the incessant expansion which has not only been open, but has even been forced upon them. He would be a rash prophet who should assert that the expansive character of American life has now entirely ceased. Movement has been its

'Colonial travelers agree in remarking on the phlegmatic characteristics of the colonists. It has frequently been asked how such a people could have developed that strained nervous energy now characteristic of them. Compare Sumner, Alexander Homilton, p. 98, and Adams, History of the United States, vol. i, p. 60; vol. ix. pp. 240, 241. The transition appears to become marked at the close of the War of 1812, a period when interest centered upon the development of the West, and the West was noted for restless energy.—Grund, Americans, vol. ii, chap. 1.

"See the able paper by PROFESSOR DEGARMO on "Social Aspects of Moral Education," in the Third Yearbook of the National Herbart Society, 1897, p. 37.

² See paper on "The West as a Field for Historical Study," in Report of American Historical Association, for 1896, pp. 279-319.

dominant fact, and, unless this training has no effect upon a people, the American energy will continually demand a wider field for its exercise.* But never again will such gifts of free land offer themselves. For a moment, at the frontier, the bonds of custom are broken and unrestraint is triumphant. There is not tabula rasa. The stubborn American environment is there with its imperious summons to accept its conditions; the inherited ways of doing things are also there; and yet, in spite of environment, and in spite of custom, each frontier did indeed furnish a new field of opportunity, a gate of escape from the bondage of the past; and freshness, and confidence, and scorn of older society, impatience of its restraints and its ideas, and indifference to its lessons, have accompanied the frontier. What the Mediterranean Sea was to the Greeks, breaking the bond of custom, offering new experiences, calling out new institutions and activities, that, and more, the ever retreating frontier has been to the United States directly, and to the nations of Europe more remotely. And now, four centuries from the discovery of America, at the end of a hundred years of life under the Constitution, the frontier has gone, and with its going has closed the first period of American history.

² The commentary upon this sentence — written in 1893 — lies in the recent history of Hawaii, Cuba, Porto Rico, the Philippines, and the Nicaragua Canal.

MEDIÆVAL AND MODERN HISTORY IN THE HIGH SCHOOL.

By Professor James Harvey Robinson, Columbia University.

I.

We are just now making a brave attempt to clarify our ideas history as an educational subject. Some progress has already be made, for there is at least a general and hopeful agreement that the o way of teaching is on the whole bad. Our discussions turn, however almost exclusively on method. Yet the way we teach is, after a dependent upon what we teach, and I am very sure that our attempt to come at proper methods will prove fruitless until we have careful considered and determined what the content and aim of our historic instruction should be. We must, assuredly, decide in a general with the is most expedient to teach before we can profitably addresourselves to the problem of presentation.

Professor Mace, it is true, uses the expression "method in history in a comprehensive sense, so as to include the substance, as well the form, of instruction. He emphasizes in his thoughtful little hoof "something far more fundamental" than diagrams, chronologic charts, and expedients of like nature. His aim is to discover "il determining factors in method, and not the determined," for upon the determining principles the so-called methods of teaching test To these must appeal be made in deciding what devices shall be used questions asked, or directions given."

I agree heartily with Professor Mace, that the discovery of net pedagogical devices, no matter how cunningly contrived, can but de harm if they be used to impress only the fatuities and mistakes which usually pass current as history. No one can read Professor Mace's suggestive essay without perceiving how arbitrary and haphazard is out traditional selection of subjects to be presented to the history class. We may some of us feel that his "processes in organizing history" and a bit too metaphysical; but he deserves great credit for making abundantly clear the necessity of discriminating choice. He has

^{*} Method in History, Boston, 1897

offered a tentative solution of the comparatively simple problem of our own short past. How much more difficult would his task have been had he attempted to "organize" the history of Europe during a millenium or so? My theme, however, is European, not American, history, and I must perforce approach my problem in a spirit different from Professor Mace's.

The reader will quickly discover that I am not versed in pedagogical science; I sadly confess that I have never read the inspired utterances of that patron saint of pedagogy whom I should now so gladly propitiate. But even Professor Mace agrees that it is unnecessary to discuss in this connection "the unsettled problem concerning the identity or non-identity of mind and subject," so I am, at least, happily exonerated from that responsibility. I ought, too, in fairness to the reader, to make the further bumiliating confession that I am unable, like Professor Mace, to indicate and illustrate "under the head of the educational value of interpretation and coordination and subordination the specific intellectual processes and products," or "the emotional and ethical stimulus." I am, indeed, a teacher like those whom I address, but my methods are what Mr. Frank Stockton would call "ramshackle" rather than "reg'lar." I have had to do almost exclusively with relatively mature and advanced students, whom I have treated - too consistently, perhaps - simply as men and brothers. I shall consequently say little or nothing about the way to teach. On the other hand, the question of what to teach is a very serious and fundamental one, and one to which my attention has been pretty constantly directed during the past few years.

Like many other teachers, I have become thoroughly dissatisfied with our traditional conceptions of history. It seems to me that we have too long accepted such incidental good as a haphazard study of the past brought with it, without trying to discover the exact kind of good which comes to us when we turn back and contemplate man's activity in places and ages far remote from us. Yet, as Schiller says,

Den schlechten Mann muss man verachten, Der me bedacht was er vollbringt.

So long as we are uncertain or careless of our aims, our methods of instruction will remain crude and inefficient.

'Some portions of the present paper were read before a meeting of the New England History Teachers' Association, in Boston, last October.

To come now at once to the very fountain head and perent source of all our difficulties and discontent, we find it in the exceed vagueness, the immeasurable vastness of our subject. Is not hater everything true about everything which man ever did, or thought, whoped, or experienced? Is it not the limitless science of past happer affairs? We are within the bounds of history whether we decipbe a mortgage on an Assyrian tile, come at the value of the Diamond New lare, or describe the over-short pastry to which Charles V was add control to his undoing. The tragic reflections of Eli's daughter-in-law, when she learned of the discomfiture of her people at Ebenezer, are histen so are the provisions of Magna Charta, the fall of Santiago, the dimense between a black friar and a white friar, and the certified circulated of the New York fournal upon August first of the current year. Each fact has its interest and importance, all have been carefully recorded

Now it would seem as if no thoughtful person could open the thou closely printed volume of human experience without asking himself toward what few things he ought to direct his attention. If he is a teacher, he will reflect upon the meager portion of their time which his pupils, even those most ardently interested, can give to a contemplation of the bewildering past of nations other than their own. The more he ponders the more disheartened he will become. It behoove him to learn what is best worth learning, and teach what is best worth teaching. Momentous facts oppress him on every side; he must, he sees, sometimes neglect even the most prodigious occurrences if he would ever find his way to the navel of this hideous wood.

Upon turning to the manuals he gets but cold comfort. For the obvious, pressing need of picking and choosing, of selecting, re-selecting and selecting again would seem to have escaped almost all of our text-book writers—I speak now only of the books upon European history, as our own national experiences have recently been retold with admirable insight and a fine sense of the relative values of things. Those who deal with the history of Europe write down pretty much what first comes to hand with a serene confidence that it is somehow worth repeating. They seem to forget that what appeared interesting to a historian of a hundred years ago may have lost its interest for us now, and that the untiring research which has been carried on during the last fifty years in the field of history has often so modified our conceptions of the past that many important matters have been put in an entirely new light.

So the feeling is becoming stronger and stronger among thoughtful teachers that a new guide is necessary for both teacher and pupil, a text-book which shall shake itself free from convention and tradition, which shall present within its five or six hundred pages a judicious, rational, pertinent, impartial, scholarly, sympathetic, and intelligible account of the most signal achievements of mankind during the period and within the countries with which it deals.

In discussing this text-book of the future I shall take advantage of the division of periods recently sanctioned by the distinguished Committee of Seven of the American Historical Association. It has proposed that the first eight centuries of our era, down to the establishment of the Carlovingian Empire, be treated in connection with Roman history. There are certainly a great many good reasons for this. There will, at any rate, be no more excuses for fostering the venerable illusion that the importance and interest of Rome ceased with the accession of Augustus. The committee farther recommends that the history of the continents of Europe, from Charlemagne to our own day, be considered as a whole.

It is this latter period of which I intend to speak—a good thousand years, during which the Europe of Erigena, Louis the Pious, Nicholas I, and the False Decretals grew into that of Helmholz, Bismarck, Louis Blanc, and Leo XIII. The problem may be quite simply stated, however difficult its solution may prove. What is best worth telling our pupils, in the high school and academy, about Europe during the past thousand years? If we recollect that we usually have, even under the most favorable circumstances, but a year in which to present the whole bewildering theme, the preparation of a suitable text-book which shall satisfy the demands of the thoughtful and highly-trained teacher of today will appear a well nigh superhuman task. It is obviously no trifling venture to be lightly undertaken. It should require, as Luther says of translation, a right devout, true, industrious, anxious, well versed, experienced, and practical mind; in short, "ist nicht eines ieglichen Kunst."

There is a useful old book, by a once notorious Dominican monk, which some of us students of the Reformation have run across, called A Little Bundle of Things to be Sought After and to be Shunned. This title aptly expresses the modest intent of the present paper. There are certain unquestionable defects, it seems to me, in the text-books of European history with which I am acquainted; some of these I

propose to point out. Modern thought and investigation have changed our attitude toward the past of humanity; just as scientific research has modified our views of the world about us. The intricate physical theories of Plato and Aristotle, the botany of Discorides, and the pathology of Salerno are no longer taught; so in our own study of the past, the campaign of Charles V in Tunis, the doughty deeds of Marlborough, the court life of Anne of Austria, and the diplomacy culminating in the treaty of Aix la Chapelle must now give way to a consideration of the deeper changes and the more permanent social conditions. We shall first make up our little bundle of adverse criticisms upon the present style of manual, we can then turn to the spirit and substance of things hoped for.

H.

A conspicuous defect of our present text-books and manuals is a careless selection of matter and the introduction of mere names of persons and places, which are of no possible importance for the reader, or which, for want of space, must be left as undetermined as x, y, and z in an unsolved equation.

I open a really good modern volume which treats of the whole of Europe in the last century, as it approached the momentous crisis of the French Revolution. One would suppose that the writer would find it necessary to resort to the most critical sifting of his material in order to make clear the regenerative workings of the new spirit of enlightenment amid conditions essentially difficult for us to understand. But no, he is hypnotized by a list of names and we encounter exhilarating paragraphs like the following:

"Zinzendorf died in 1742, Stahremberg in 1745, Kinsky in 1748. While Uhlfeld became on Zinzendorf's death nominally chancellor, Bartenstein remained from 1740 to 1753 Minister of Foreign Affairs, and had the greatest influence in the secret conference of ministers." Very true, but was there nothing better to say about an ill-understood century than to give the dates of the deaths of the members of an Austrian cabinet?

An able historian of the French Revolution who finds no time to tell us how it all came about, cheerfully devotes many paragraphs to matters like the following: "The bailliage of Aunis claimed to be independent of Saintonge, the royal bailliage of Nivernais asserted that it included the ducal bailliage, and the old quarrel between Upper and Lower Auvergne again broke out. Similar rivalry appeared between the cities of Riom and Clermont-Ferrand, each claiming to be the capital of the bailliage of Lower Auvergne, and between the towns of Clermont en-Argonne and Varennes; Chateauneuf-en-Thimerais asserted that it was a royal bailliage, and not dependent on Chartres."

The introduction of such dry and superfluous detail is perhaps commonest in the books which must be used in colleges and by the general reader. Still, the same tendency to catalogue mere names can be seen even in so good a text-book as Meyer's Mediæval and Modern History. For example: "Louis crossed the frontiers of the Republic with an army of more than 100,000 men, headed by the greatest commanders of the age—Condé, Turenne, and Vauban. In a few days three of the United Provinces—Utrecht, Gelderland, and Overyssel—were in his hands." Or, "The king called to his side successively Maurepas, Turgot, Necker, and Calonne as his ministers and advisors." Several of these names are mentioned nowhere else in the book. Some valuable space could certainly be saved in even our best books by carefully excluding such names as must of necessity be completely meaningless to the pupil.

It would not be difficult, of course, to explain how these names and irrelevant statements creep in. They mean something to the writer, who mistakenly infers that they are eloquent in themselves. Or he may suppose that they give greater vividness to his tale, or will form the nucleus about which future knowledge may crystallize. Names but once mentioned, however, add no vividness to a story, but only obscure it, and it is safe to say that the mention of Overyssel, Clermont-Ferrand, Kinsky, and Maurepas are little likely to stimulate farther historical research, but rather to promote a general obfuscation.

A second and much more fundamental weakness of our history manuals is unfortunately only the natural outcome of the traditional conception of the purpose of history. History, as commonly understood, concerns itself not with the normal conduct and permanent achievements of mankind in the past. Like a sensational drama it purposely selects the extraordinary, the picturesque, the lurid as its theme. The newest book on France, issued by a hitherto peculiarly discriminating publishing house and received with much good will by a facile press, well illustrates this view of the past. The annals of France, Mr. Watson observes, will always command especial attention.

¹ The Story of France, New York, 1899; vol. 1, pp. 13, 14.

"No other modern nation has undergone changes more frequent, more radical, more sudden, bloody, and dramatic." Then, too: "No land has given birth to men more great, more good, more brave; none has been cursed with men more vile. No people have climbed higher in the arduous pathway of victory; none have been so pitilessly stricken down in defeat." "In his days of barbarism the Gaul, more brutal than the Indian, cut off the entire head of his victim in war, and hung it on his horse's neck as a trophy, or nailed it to his door for good luck. After some centuries of Christianity, the son of this same Gaul, the savage within him having been let loose again by the Revolution, chopped off the heads of 'aristocrats,' male and female, and bore them along the streets of Paris, Orleans, and Versailles in bloody triumph, amid exultant songs and dancing. France has furnished the epic poem of modern history."

Mr. Watson would therefore convince us that the more prodigious the occurrences narrated, the better the history. A distinguished chemist once told me that it seemed to him that the certitude of history varied in inverse ratio to what we knew about it. He might have added, with Mr. Watson's concurrence, that, in common with the black art, its intrinsic interest appeared to vary in direct ratio to its grewsomeness.

The question whether Mr. Watson is right or not is one which we teachers must answer. Ought history to busy itself by preference with exceptional and romantic persons and episodes? Should it be an epic poem, or a serious consideration of the great contrasts between different ages and different peoples — an effort to make plain the enduring rather than the fleeting? Ought the romantic events and conspicuous actors to be considered for their own sakes, just because they are romantic and famous and hence, it is assumed, worth knowing about, or ought they to be selected and presented so as most efficiently to illustrate the life of the people, their institutions, limitations, and habits of thought?

It is obvious, to one who runs through the current historical textbooks of European history, that their writers have not asked themselves this question. While some things are described because they are evidently important, many persons and events are included for no other reason than that they are striking. Marat will find a place where there is no room for Turgot. As much space will be given to the fall of the Girondists as to the invention of printing. Joan of Arc is assured of a page or two, but one of the mightiest of popes, Innocent III, must be satisfied with a line. Mr. Meyers gives about the same space to Charlotte Corday as to the Italian Renaissance of Art. Charles V's expedition against Tunis is given a page, but what about Cologne cathedral and its fellows, and their mysterious origin and growth through the centuries? "War tumults, which for the time din every ear, and with joy or terror intoxicate every heart, pass away like tavern brawls and except some few Marathons and Morgartens, they are," as Carlyle says, "remembered by accident, not by desert." The cathedral, however, even in faint adumbration may still fill our hearts with joy as we pass along upper Fifth Avenue.

In no other subject is fortuitous prominence accepted as a measure of educational value. The teacher of chemistry does not confine himself to pretty experiments, but conscientiously chooses the most typical and instructive ones. Metallic potassium and liquefied air are less common in the laboratory than water, lime and sulphuric acid. What would be the opinion in regard to a lecturer on pathology who dwelt upon leprosy and the bubonic plague for fear his students might be bored by a description of the symptoms of measles and typhoid? In every study except history the teacher seeks to make the important clear at any cost. All his expedients are directed to that one end. The rule, not the exception, is his object. He is rightly suspicious of prodigies. The phænix and the dodo have given place to a very common lot of oysters and cats in the zoölogy class.

It is noteworthy, too, that we generally recognize the misleading character of descriptions of contemporaneous conditions in which only the sensational events are narrated. A full account of romantic marriages and tragic deaths; of the doings of poisoners, adulterers, and lunatics; of the cases of those who have swallowed needles to find them coming out at unexpected places years after; who have taken laudanum for paregoric, or got run over by beer wagons, furnishes, after all, but a partial, if diverting, picture of the life of a great city today. Yet Mr. Watson's description of the feudal system scarcely extends beyond dungeons—"Oh how damp, dark, and cold"—knee clamps and thumbscrews. The mediæval church was, we might infer, little more than the clever device of evil men to gratify greed and lasciviousness, and abounded in "humbugs, frauds, and bogus miracles." To make true statements is not necessarily to tell the truth. We may, like the "yellow" journalist, narrate facts, but with such reckless disregard

of perspective and with such a consistent anxiety to startle at any cost, that unvarnished fiction would be preferable. A writer who, instead of endeavoring to make plain the true greatness of the church, says "Miraculous oil was common, portions of the true cross plentiful, and such objects as St. Anne's comb and the Virgin Mary's petticoat were accessible to the devout," is guilty of gross misrepresentation within the bounds of formal accuracy.

Here a natural objection must be met. It may seem to the reader that I am advocating a necessarily ill-starred effort to teach the philosophy of history to young men and maidens. This I emphatically deny. The history I would favor must be concrete, vivid, intelligible. We ought, it is true, to select only instructive things from the unlimited treasury of the past, but the more interesting they are the better, so long as they make for an understanding of the period or country with which we are dealing. I would certainly ardently recommend for educational purposes a different set of facts from those conventionally selected, but they would be facts none the less. To repeat an illustration of my own: "Heresy was long looked upon by the state as a crime worse than murder or high treason and treated accordingly," is a statement of fact, not a philosophical theory, and it is surely more significant for the pupil than the statement that Charles VI of France died in 1422, or that the battle of Marignano was fought in 1515. The one fact is a permanent acquisition, which serves to explain much that would otherwise be ill-understood, the others we may never have any use for, they are not self-luminous, and even professional students of history would in nine cases out of ten have to verify the dates in a book of reference."

As an illustration of what might be called the philosophy of history I cite a paragraph from Professor Patten's new book." "It is often stated that the Reformation was an offshoot of the Renaissance, but this implies a misunderstanding of the social forces that were reconstructing society. In a reversion the motor reactions of longest standing create the dominant motives, and force into a secondary place the newer motor tendencies that are the outcome of the economic pressure of the preceding epoch." Probably this idea could not be stated so simply as to have any meaning for a high-school pupil. Turning over a leaf or two we come, however, upon a bit of philosophic history

^{*} Cf. Educational Review, June 1898.

[.] The Development of English Thought, pp. 86 sq.

which could, and should, be made plain to the pupil. "Judged by Protestant standards the church of the fifteenth century was a failure. Yet these standards are partial, and those who use them judge an old civilization by the standards of a new one. Judged by the old standards the church of that time may be regarded as a success. To view the church of that period primarily as a religious or a moral organization puts it in a wrong light. At bottom it was a civil institution, and it should be judged according to its civil and economic program. Each age has its aims and ideals, and if the church of the middle ages realized the social program set by the conditions of its time, it may justly claim to have been a success. The ideal of the church was to secure peace, and it rightly demanded obedience as a means to an end. The first duties of men were unquestioning obedience and humility in the presence of church authorities. It would have been impossible for the church to awe nations, to restrain rulers, to prevent local quarrels, and to check the aggressions of the strong except by educating every person to be obedient and humble when the authority of the church was interposed between him and the objects of his desire. The economic aims of the church were also fairly well realized. It provided food and shelter for workers, charity for the unfortunate, and relief from disease, plague, and famine, which were but too common in the middle ages." In this second passage there is nothing inherently obscure or abstract in the ideas, which could be made amply plain and interesting by a simple re-statement and the use of illustrations. The thought is a momentous one, absolutely essential to an understanding of European history, whereas the causal relation between Renaissance and Reformation is an academic question, the solution of which is of no consequence for a schoolboy or girl.

Professor Patten's warning that we must not judge the past by present standards suggests another vice of too many of our history books, both big and little. It is a want of that sympathy without which we can never see the past in its true light. It is easier to make sport of what now seem to us perverse habits and institutions than to explain them. It is not the function of history to condemn off hand long enduring institutions, like the celibacy of the clergy, the Inquisition, and the divine right of kings, but to discover on what ground they were supported by the best and most thoughtful men of old.

Lastly, among the chief faults of our text-books is a striking want of scholarship. Not only are the writers obviously ignorant of the languages in which the best treatises upon their subject are written, but they take no pains to consult the best and most recent of the sources to be had in English. The works of Hallam, Milman, Guizot, and Robertson are from fifty to a hundred and fifty years old. Great progress has been made since their day. New sources have been opened up and old ones conveniently re-edited, and what is still more important, a new spirit determines recent research, which renders much that they did nugatory and beside the point. It is doubtful if a really satisfactory manual could be based exclusively upon works in English, but many inveterate errors might be purged away by consulting Mr. Henry C. Lea's monumental studies, Bishop Creighton's History of the Papacy, Rashdall's Universities of the Middle Ages, Burchhardt's Culture of the Renaissance, Beard's and Janssen's treatises on The Reformation. Professor Stephen's French Revolution, Professor Sloane's Napoleon, and other contributions founded upon a conscientious examination of the best primary sources.

Naturalists are said to be extinct except perhaps in Spain, where a few of them may still lead a precarious existence upon the confines of modern progress. Such universal and fruitful curiosity as that exhibited by Humboldt or Agassiz belongs to an earlier period than our own. No conscientious man of science would venture in our day to treat the cosmos as a whole, from the snows of Popocatepetl to the hyssop that springeth out of the wall. It is needless to point out that this diffidence is due to a deeper insight into nature, and the discovery of realms of research undreamed of a century ago. Now the specialist may at any moment profoundly modify, or correct in some important particular, the general conceptions of the science with which he is concerned, and in this way he crosses the path of the teacher, who can no longer describe the world as it appeared even to the keenest observer before Darwin, Helmholz, and Edison. The researches of the specialist discover new laws and furnish fresh and important illustrations of old ones. Many of his investigations will doubtless have to do with technical or abstruse developments which cannot properly be brought within the scope of a text book or the ken of the pupil. But it will nevertheless be apparent that these special workers have greatly altered the general spirit, as well as the content of instruction in all branches of natural science, as may be

seen by comparing the best text-books of physics, chemistry, geology, and botany with those of half a century ago.

It is high time that we frankly recognize that history has been undergoing a similar if less conspicuous change - a change which was perceived by Carlyle some sixty years ago. "Doubtless," he writes, "it is with a growing feeling of the infinite nature of history, that in these times, the old principle, division of labor, has been so widely applied to it. The political historian, once almost the sole cultivator of history, has now found various associates, who strive to elucidate other phases of human life, of which, as hinted above, the political conditions it is placed under are but one, and though the primary, perhaps not the most important of the many outward arrangements." It takes a score of men nowadays to write a history of the world. Few are bold enough to attempt to treat by themselves the whole of even our own brief past, easily understood as it is when compared with that of Babylon, Greece, or Mediæval Europe. There is a unity in history and a unity in science but the vastness of each is such that a division of labor is now acknowledged to be absolutely essential to progress. How far this division of labor has taken place can be seen in our large universities. A single professor of history would now be as anomalous as a single professor of science or of literature. It is not unusual to find four or five teachers of history in our more completely equipped

That such specialization has its drawbacks no one will deny. But without it many a fable convenue which has been discarded would still hold its place, and many an important phase of human activity would still be unexplained. The past half-century has been a period of unprecedented activity on the part of historical students. Thousands of volumes of hitherto unprinted or unavailable material has been published, and much of what is most valuable in the European collections of manuscripts can now be conveniently read in our larger university libraries. Hundreds of monographs appear yearly which treat in extreme detail some more or less important incident. A scholar may devote years of research to the task of estimating the value of a single historical source, or may by tireless study completely alter our notions of the significance of a particular event. Our century may well be known to posterity as a period distinguished by the extraordinary development of historical conceptions and the scientific exploitation of neglected historical sources.

If we consider not only the progress of historical research but the development of the cognate subjects of political economy and social ogy, the inexpediency of relying upon works written fifty years ago will become still clearer. Not only do we know more about the past that was known in Robertson's time, but our interests have so changed that the older works do not contain what we ask but neglect what to our age and generation seem the essentials. We are, for example, no longer exclusively, or even primarily, interested in the political, dynastic, and inilitary history. We would discover and teach something more fundamental than the succession of Henrys and Edwards, Otros and Fredericks, the shifting of boundary lines, and the concentration and movements of troops.

To sum up, the four most obvious defects of the text-books of European history at present in use are, (1) the careless introduction of mere names which can have no possible meaning to the pupil, and which instead of stimulating thought and interest, merely weigh down by spirit. (2) The narration of extraordinary episodes, not because they illustrate the trend of affairs, or the life of the people, but because ther are simply conspicuous in the annals of the past. This results in an absurd want of perspective which gives a demented journalist like Marie more space than Erasmus. (3) A failure to judge and explain the great institutions of the past by the causes which gave rise to them, and the application of nineteenth century standards to eleventh century expedients. (4) Lastly a want of special preparation on the part of the authors, who never come in contact with the primary sources at any point and who rarely make use of even the best secondary sources available in English. Hence their manuals are maccurate and antiquated in spirit.

A glance at the new histories of the United States, published during the last few years, will show better than anything else what must be done in order to bring the manuals of European history up to the same standard. Scholars like Johnston, Scudder, Channing, McMaster, and Eggleston have made the great issues plain and have taught us to disassociate the petty and fortuitous from the significant and editing. The same teacher who would blush with shame if he were surprised beginning the consideration of our Civil War with the fall of Fort Sumpter, or starting to trace our Revolution from the engagement at Lexington, will unquestioningly begin his treatment of the Renaissance with the fall of Constantinople, of the Reformation with Hallowe'en

1517, and of the French Revolution with May 5, 1789. Only when our books on European history have received that thoughtful, thoroughgoing revision which those relating to our own land are undergoing, at the hands of highly trained specialists and successful teachers, only then can we hope to reap for ourselves and our students that abundant harvest of wisdom which coines from the study of other nations than our own. There are some encouraging signs however. Professor Emerton, Professor George B. Adams, and Mr. and Mrs. Barnes were all excellently equipped for the work they have done, but it will require the combined efforts of all those working in the vast field of continental history to solve the problem of producing a manual at once cogent, intelligible, interesting, and true, which shall depict as adequately as may be the development of Europe since Charles the Great.

III.

Before attempting to determine what a good text-book should contain, I may be pardoned for briefly considering some of the reasons commonly assigned for the study of European history in our schools. For, as was said at the outset, we must necessarily have some tolerably well defined purpose if we are to select our material intelligently from the infinite abundance of past human experience.

It is, in the first place, often urged that even the hastiest and driest chronicle of the chief events in the world's history is a good thing—that we get at least a chronological outline which we carry about with us to guide us in our future acquisitions. This enables us to put our knowledge in its proper relations. We learn important dates so as to read intelligently later of the events themselves, of which we learn only the names in school. We prepare ourselves to place our contingent knowledge of literature, philosophy, institutions and art in what is called a historic setting. Many of us have, however, come to suspect that such an outline amounts to very little. It recommends itself only as the easiest kind of history to teach; it requires no thought, only memory. We are little wiser for having it and how soon mere dates and names escape us! I recently had occasion to ask a college professor of great erudition and culture, who had resided several years in the Orient, the date of the Hegira, which with that of Marathon and the battle

'Cf The Report of the Committee on Text-Books of the New England History Teachers' Association, Oct. 15, 1898.

of Crécy are generally regarded as a part of the equipment of every educated gentleman. He did not know the date, however, any better than I did, and we looked it up in a dictionary. We might indeed have saved a minute or two if we had had the information at our tongues end, but we had never missed it before. I was struck by the incident and related it to Mr. Henry C. Lea, of Philadelphia, than who no one in this country and few in any other can rank higher as a historical scholar. Mr. Lea's deep set eyes sparkled humoroush as he replied: "I don't believe I could come within forty years of the date."

A sensible carpenter or mechanic does not carry a saw in his hip pocket, or a coil of lead pipe over his shoulder, in order to be ready for a distant emergency. He sensibly goes to his shop and his tool chest to do his work. No more in these days of cheap and convenient books of reference need the student go heavy-armed for intellectual encounters. Let him learn his trade and not faint under the burden of tools, whose use is only remotely contingent. Of course all knowledge, even that which is well forgotten, may beget a certain habit of accuracy and sense of proportion, but formulas should follow knowledge, as they do in our best mathematical text-books today. In historical instruction we have sometimes given our formulas first.

Another supposed use of history is to enable us from the past to forecast the future. If such prophetic insight were once possible it is no longer so. Our century is too different from all that has preceded it to permit anything except the vaguest inferences. The improved means of communication have alone thrown the old world quite out of joint, not to speak of the industrial revolution and the growth of democracy. The last century has seen greater changes, material and intellectual, than are contained in the whole history of the world from the fifth millennium before Christ, which my friend Professor H !precht properly designates ancient history, to the middle of the eighteenth century. The future is pretty dead reckoning. Just as war was being declared with Spain I had a conversation with my colleague, Professor Moore, who is deeply versed in diplomatic history. We heartily agreed that if history justified a single safe inference it was that Spain would not conclude a treaty of peace until long after the had been forced to discontinue the war from exhaustion. We recalled many fantastic instances, from the tardy recognition of the independence of the Netherlands down to the war with Peru. Yet present

conditions proved such that, as we all know, Professor Moore was himself assisting in drawing up a treaty of peace within four months after the declaration of war, and the document was signed by the high contracting parties well within a year.

History is not to be studied then, primarily, to gain encyclopædic knowledge, for that is an anachronism in the midst of books of ready reference, however expedient mere information may have been to a student of the thirteenth century as he left his university for some bookless provincial town. Neither does history supply a basis for useful inductions as to the future. It can only make false prophets of us at best. History should minister to wisdom—a very different thing from knowledge.

Two much sounder reasons are commonly urged in favor of giving European history a place beside American history in our schools. These reasons are so familiar as to require only to be mentioned. In the first place, the past of Europe is infinitely richer and more varied than that of our own country. It exhibits struggles and ambitions of which we know little or nothing. Political, industrial, even military phenomena we can study in our past, but the development of the human spirit must be observed as it unfolds itself on a larger scale, and through longer periods.

It is argued, too, that our country is, or was at least, a branch of a parent vine, that our history is unintelligible without a knowledge of the past of Europe, especially of England. To understand the French and Indian War we must obviously know something of the coördinate Seven Year's War; to understand our bills of rights we must contrast them with similar declarations abroad. Well and good. I should be the last to question this. But, after all, these two reasons—one the superior richness of European history, and the other its value in explaining concrete events like the Embargo, or the invasion of Mexico by Maximilian—both these reasons I believe to be in a way secondary grounds for the promotion of its study in our schools and colleges.

There are still more fundamental purposes in turning the attention of our boys and girls to the development of European culture. Without it they can neither understand their own country and its institutions, nor can they learn the most profound lesson which history should inculcate. When I say they cannot understand our own past and present without studying that of Europe, I do not mean first and foremost that our history is so interwoven with that of Europe that we

must now and then glance across the Atlantic to see how Spain first got hold of Florida or Cuba, or England of Canada, or how we happen to be addicted to trial by jury. We all acknowledge the necessity of recognizing the existence of other nations now and then, when we have rubbed against them, or borrowed some institution from one of them. In a much more profound sense than this, European history is essential to a comprehension of ourselves and our country and our country's past. It certainly does not necessarily follow that, because they are nearest and dearest, our own experiences should absorb our attention. We do not discover the deepest truth about ourselves by searching our own hearts. No more can we surprise the secret of our national temperament and achievements by an ever so minute study of Andrew Jackson, of the siege of Fort Pillow, or the resumption of specie payments. Why not? Because in our own past we are dealing only with our larger selves, with those on the whole much like us, or only differing from us in quite easily conceivable degrees. Born on the prairies of central Illinois, mountains, rivers, hills, rocks, and the sea, were in my boyhood all beyond my ken. But what was worst, and this is the gospel I have to preach, the peculiar beauty of the slightly undulating fields of green or golden grain, with their high osage orange hedges was lost upon me. Even the significance of four feet of rich black loam on the surface of the earth I failed to see. We are blind to what is familiar. Our plight would be similar should we immerse ourselves and our pupils in American to the exclusion of European history. We might seem to be traveling toward the goal by the most direct path, but we should in reality be following one which can never bring us to our true destination. Every teacher of American history should have before him that profound saying of St. Paul's. based as it is upon the deepest moral and psychological truth: "They measuring themselves by themselves, and comparing themselves among themselves, are not wise."

Many illustrations might be given of the national self-knowledge which comes from a conscientious study of other peoples and times. But examples will occur to everyone. Everyone will recoilect instances when he first became conscious of some racial or social peculiarity by observing its absence in another highly civilized nation. Who ever really understood Protestantism without sympathetically studying Catholicism at its best, or our federal system without an acquaintance with that of Germany or Switzerland?

As the apostle Peter was one day anxiously awaiting his noon-tide meal at the house of Simon the tanner, he saw heaven opened, and a certain vessel descending unto him, as it had been a great sheet knit at the four corners, and let down to the earth. Wherein were all manner of four-footed beasts of the earth, and wild beasts and creeping things, and fowls of the air. And there came a voice to him, "Rise Peter; kill and eat." Famishing as he was his whole Jewish nature revolted against such a suggestion, and the vessel was received up again into heaven. Now while Peter doubted in himself what this vision should mean the Gentile messengers stood before the gate. He went with them to the house of Cornelius, a centurion, of the band called the Italian band, and there the whole significance of the mysterious trance dawned upon him. All his Jewish chauvinism and jingoism was forced to give way before the illuminating truth that God is no respecter of persons. It was the Gentiles and not his own nation who were to accept and propagate the new religion. He had been shown that he should no longer call any man common or unclean.

Now I firmly believe that of all the good lessons which history should teach us, this lesson of cosmopolitan sympathy is far the most important and far-reaching. When the past, with all its bewildering spectacle of human enterprise and efforts is opened before us, confused at first sight as the contents of that strange vessel which so perplexed Peter, ought we not to see in it a divine protest against all national bigotry, and an easy acquiescence in the propriety of the merely familiar? Must we not learn that, however great, we are not a peculiar people?

The valuable thing in history—to paraphrase an excellent saying of Matthew Arnold's in regard to literature—the most valuable thing in European history for us Americans is, it seems to me, "the judgment which forms itself insensibly in a fair mind along with fresh knowledge" and this judgment almost anyone with a fair mind, even the school child, I believe, if he is so lucky as to be properly taught, may hope to attain to. For this judgment comes almost of itself; and what it displaces it displaces easily and naturally. Our whole place and mission in the universe come to look different to us as we view ourselves in the light of Europe's moral and intellectual achievements during two thousand years before the United States came into existence.

IV.

The partiality exhibited by our text-book writers for certain classes of historical facts is obviously no proof that other and more pertinent facts should not be brought to the pupil's attention. For it may be, as we have seen, that events are narrated simply because they are pleasing or dramatic or highly exceptional; or they may be mentioned because it is deemed proper that an educated man should know that Philip Augustus became king in 1180, and the Battle of the Boyne was fought in 1660. But none of these reasons are very good, as I have tried to show, and a writer whose selection is determined by them is pretty sure to produce a manual in which famous episodes and mildly diverting anecdotes are given a didactic seriousness by a proper admixture of dry, traditional imformation.

There is, however, a very simple principle by which the educationally relevant may be determined and the irrelevant rejected. Is the fact or occurrence, one from which some valuable conclusions may be drawn, which will aid the pupil to grasp the meaning of any great period of human development or the true nature of any momentous institution? It should then be cherished as a precious means to an end, and the more engaging it is, the better. Its inherent interest will only facilitate our work, not embarrass it. On the other hand, is an event seemingly fortuitous, isolated and anomalous, like the story of Rienzi, the September massacres, and the murder of Marat? We should then hesitate to include it on its own merits, for interesting as it may be as an heroic or terrible incident, it will take up space in a little book, every line of which will be needed to make tolerably clear the prevailing interests, preoccupations and permanent achievements of the past.

The chief defect of our current text-books is, that they treat the middle ages, the Renaissance, Reformation and Revolution as merely a series of events, a record of heroic and shameful deeds. No serious effort is made to render the essential characteristics of the period or transformation clear. The natural result is that while a pupil may know that Luther posted up his Theses, on October 31, 1517, that Charles V was the grandson of Maximilian and of Ferdinand and Isabella, that he was elected emperor in 1519, and fought with Francis I over Milan and Burgundy—while he may have heard of Adrian VI and Clement VII, of the battle of Pavia, and the Diets of Worms, and

Augsburg, he may nevertheless be absolutely ignorant of the real character of the Protestant revolt, and may never even have heard of the accompanying conservative reformation. There is no time, and perhaps little inclination, to explain the root of the matter. It is carelessly assumed that the fundamental issues are self explanatory and that only the notable occurrences need be enumerated in order to give a satisfactory and adequate conception of the time.

A second conspicuous defect of our manuals is, notwithstanding oft repeated protests, a disproportionate fondness for military and political events. Carlyle's warning is unheeded, that far away from senate houses, battlefields, and king's antechambers "the mighty tide of thought and action was still rolling on its wondrous course." The winning or loss of a bit of territory by a Henry, a Louis, or a Frederick, the laborious piecing together of the several European states, the growth of national feeling, and the struggles between peoples—even between rival dynasties, may not be altogether neglected: but man is more than a soldier, subject, or princely ruler. For example, in the middle ages, he organized a church more remarkable, by all accounts, than any government, even that of Rome. He has, through the ages, made voyages, extended commerce, founded cities, established great universities, written and read books, built glorious cathedrals, painted pictures, and sought out many inventions.

History is

An orchard bearing several trees, And fruits of several taste,

not a question of military expeditions, treaties, and disputed successions. We cannot afford to teach our pupils only "past politics," for if we do, how are they to learn anything of the other equally important phases of social activity and interest; of the development of the church, of commerce, art, and material progress? These must be treated in our schools, if at all, in the history class, and until they are included along with the political changes history will remain a poor, inadequate, ill-understood theme.

The business, then, of a text-book of mediæval and modern European history should be the description and explanation of the most signal achievements of western civilization during the past thousand years; its purpose should be to make clear the great changes, especially those we call the Renaissance, the Reformation, and the Revolution; to tell how they came about and what they meant.

It will obviously be impossible, in re-writing our manuals with this broader program before us, to satisfy those who cling to the belief that the main educational value of history is to furnish an outline of events, chiefly political. Many occurrences hitherto regarded by popular compilers as trump cards in the game, will have to be discarded, many famous names cannot even be mentioned. Yet, while events cannot be narrated for their own sake, many of the most cherished incidents may be used, like lantern slides in a properly illustrated lecture, to make historical conditions and institutions plain and living to the pupil. The problem as it now presents itself is, assuredly, no contemptible one. Our object is not to chronicle a series of events, but to set forth the several stages in the progress of European culture since the eighth century.

To do this successfully it will be necessary to emphasize in our teaching, not only the crises in human affairs, but the neglected transitional periods as well. The pupil is ordinarily taught to view mankind as in a periodic state of turmoil. We do all we can, by studied neglect, to disguise the importance of the lucid intervals, during which the greater part of human progress has taken place. We skip lightly from one commotion to another. We have no time to explain what the French Revolution was by rationally describing the ancient régime, which can alone give it any meaning, but after the quotation from La Bruyère regarding certain fierce animals, "black, livid, and burnt by the sun," and a repetition of that careless phrase, "after us the deluge," we hasten on to the Reign of Terror as the be-all and end-all of the whole bloody affair. And in this way we make a second St. Bartholomew's of one of the grandest and, in its essential reforms, most peaceful of changes which ever overtook France or Europe. For the real revolution which deserves to be ranked with the Renaissance, the Protestant revolt and the Counter Reformation was practically accomplished by 1700. Obviously, the significance of a revolution is to be measured by the extent to which conditions were changed, and new things substituted for the old. The old must, therefore, be studied quite as carefully as the new-more carefully, indeed, since our sympathies are ever with the new, and our knowledge of the more recent is fuller than that of the more remote. Hence we might better busy ourselves with the reasons why arbitrary imprisonments, the guilds, the sale of offices, etc., were defended by many thoughtful, earnest citizens, than waste time in a gratuitous denunciation of them.

In order to follow the fundamental historical changes it is, however, absolutely essential that the pupil should be told something of the institutions of the past. He must, at least, have a correct, if elementary, notion of the two greatest and most characteristic products of the middle ages, the feudal system, and the mediæval church, for not only are the middle ages a blank without them, but the history of Europe—down to the French Revolution, to say the least—is outright inexplicable unless we understand them. They are the two keys which can alone unlock the past.

By illustrations, examples, and typical incidents, the salient peculiarities of the feudal organization, which it took Europe so many centuries to outgrow, ought to be made clear and comprehensible. The fundamental characteristic of the feudal order, the association of personal, governmental, and property relations should be contrasted with our modern notion of citizen and state, and our simple system of land tenure.

As to the church, no intelligent student of the past will be inclined to question the statement that it is incomparably the most important single institution with which we have to deal during the period of which we are speaking. The pupil must learn how there came to be a pope who was in stern reality a king of kings, who deposed emperors and might "absolve subjects from their fealty to wicked men." He should behold the church militant "as an army encamped on the soil of Christendom, with its outposts everywhere, subject to the most efficient discipline, with a common purpose, every soldier panoplied with inviolability and armed with the tremendous weapons which slew the soul." When once he has grasped this idea, however imperfectly, the pupil will possess the secret of a great part of European history down to our own century. Without it his picture of the past must unavoidably remain blurred, distorted, and absurdly inadequate. When Hamlet is left out, the conduct of the rest of the actors will seem but meaningless gesticulations. Yet how fantastic is the description in our manuals of this most majestic and powerful of all historical human creations, in which the inmost life and highest social and intellectual aspirations of western christendom during ten long centuries are mirrored. Instead of viewing the church as the very center and embodiment of mediæval culture-die herrschende Kulturmacht'-it is

[&]quot;LEA's History of the Inquintion, vol. 1, p. 4.

^{*} KÖRTING.

represented as little more than an arrogant conspiracy of worldlyminded men to usurp the powers of a beneficent and divinely ordained state. The future was, indeed, with the state, but that should not blind us to the fact that it was the church rather than the warring secular rules which made for peace, good order, and the fundamental benefits of security of person and property. The theory of certain churchmen that civil government was devil-born, the invention of Cain and Nimrod. doubtless seemed to an impartial observer of the eleventh century amply borne out by experience. It was the church, not the incipient and still chaotic state which established the Truce of God. When our Protestant writers come to the Lutheran Revolt they must necessarily speak of the church again, but a page or two on indulgences, dispensations, and drunken monks, an allusion to "the chained Bible," and the veneration in which the "comb of St. Anne and the Virgin's petticoat" were held, suffices to explain Luther and the revolution named after him. Of course it is not easy to see from this data why a great part of Europe never accepted Luther's ideas, why upright, conscientious, and clear-sighted scholars perversely clung to the absurd anathronism of the mediæval church or gladly returned to its bosom after a temporary enthusiasm for the teachers of Wittenberg. Nor can this become intelligible until the traditional partisan conception of the church is replaced by an impartial, scholarly estimate of the true greatness of the majestic organization under whose auspices Europe advanced from the barbarism of the tenth to the enlightenment of the sixteenth century.

The subject is undeniably a difficult, and to some it will seem a ticklish, one. Yet its importance forces us to attempt to overcome the obstacles, the seriousness of which can easily be overestimated. For there is much that is concrete and readily understood in the cunningly devised constitution of this most singular international institution, and the sources and extent of its power can be illustrated in a thousand ways. The governmental, economic, and educational functions of the church should be emphasized, and only such dogmas as played a conspicuous historical rôle and exercised an obviously practical social and political influence should, of course, be discussed. Every pains must be taken to represent the medieval church as the natural and inevitable outcome of the times in which it rose to its greatest height, and to show that it enjoyed the practically unanimous recognition of high and low, in the same way that all of us

today, except the anarchist, acknowledge the right of the state to be. If the teacher will keep in mind that the church, in spite of the evil conduct of some of its officials and the acknowledged defects in its constitution, was cherished by all loyal Christians, just as we honor our federal constitution, and yet bitterly denounce the policy of individual senators or members of the cabinet, he will be able to make the history of Huss and Luther intelligible to the high-school pupil.

Our treatment of the middle ages should, then, be so ordered that both church and feudal system should seem real and plausible to the pupil. We ought, too, as the material within his comprehension becomes more abundant,' to give him some idea of the intellectual conditions preceding the Renaissance, by explaining the great enthusiasm for learning in the thirteenth century, the growth of the universities, the kind of old books that were esteemed and new books that were written—like the great encyclopædia of Vincent of Beauvais and Roger Bacon's treatises on all knowledge.

Many of the names and events customarily chronicled in our sketches of the middle ages will, no doubt, have to give way if we broaden and deepen our instruction. It would, however, be feasible to make quite clear the motives and results of Hildebrand's Reformation and of the crusades, both of which cast so much light, if rationally treated, on the conditions in church and state. Lastly the pupil ought not to leave his study of the middle ages without having his attention called to the momentous influence of a wider use of money and to the rise of the towns as centers of commerce, industry and culture.

I have dwelt at considerable length on the treatment of the middle ages because they are so consistently misrepresented, and because our grasp of modern history depends so largely on an understanding of their spirit and institutions. Perhaps a third of our hypothetic text-books should be devoted to the subjects which I have indicated.

The second third of our course of study might be devoted to the pre-Reformation period, as culminating in that most hopeful, but unsuccessful effort, at Constance, to reform the church without fundamentally modifying its organization and tenets. The sources of

⁴ Something is added each year to the illustrative material available in English, but much remains to be done before history can be taught as it might readily be taught had the teacher a wider knowledge of the contemporaneous literature.

^{*}I transcribe here some passages from a paper on "European History in the College," published in the Educational Review, June 1898.

dissatisfaction and the abuses can best be dealt with in considering this period, when all, except the Bohemian heretics, agreed that, although the personnel was bad, the church must be maintained essentially in its mediæval organization. Unfortunately, there is not much, as yet, outside of a text-book to which the pupil can be referred for the spirit of the time,' but if he comes to see that the horror of heresy, as the supreme crime, and the forms of trial and punishment, were only phases of the general jurisprudence or civilization of the period, much will have been accomplished.

For the Renaissance in its various phases the teacher will supplement the text-book by extracts from Dante, especially from his Convite, from Petrarch's letters, which admirably illustrate some of the contrasts between mediæval and modern thought and give us a picturesque account of the difficulties of readers and writers before the invention of printing. Some of Vasari's Lives of the Painters, some chapters of Cellini's Autobiography, and portions of Machiavelli's Prince, will rouse the interest of even an indolent mind. With such illustrations, the great essentials of the time are easily emphasized by a good teacher. As to the invention of printing and the age of discovery it would be but a sorry writer who should find himself addressing dull ears when speaking of Gutenberg, Caxton, Columbus and Vasco da Gama.

In treating the Reformation pains must be taken to show how patriotic, financial and political motives combined with the purely religious in promoting the revolt. The conservative reformation which was in progress, especially in Spain and Germany, before Luther's public appearance should be described and the aversion aroused by Luther's doctrine of exclusive justification by faith and consequent rejection of "good works," explained. The pupil must not, moreover, be left with the totally erroneous notion that Protestantism originally stood for toleration and intellectual enlightenment, or that progress has been confined mainly to Protestant countries. Luther, Melanchthon and Calvin were as scandalized by the blasphemous suggestions of Copernicus as any of their Catholic contemporaries. The formulation or reassertion of certain dogmas at the Council of Trent form an appropriate close to the discussion of the elements of the religious struggle.

² The writer has endeavored to furnish some material relating to the consciousness of the abuses, the conception of heresy and methods of dealing with it, in the exdection of "Translations and Reprints," published by the History Department of the University of Pennsylvania, vol. ni, No. 5.

The last third of the manual will naturally include a very brief review of the territorial and dynastic struggles, culminating in the war of the Spanish Succession. Here the accumulation of the Hapsburg possessions and the foreign policy of France serve as a type of much of the political history which we have been forced to omit for want of space. The two really important points for the pupil to grasp during the succeeding period are, first, the reform movement in France, culminating in the decree abolishing the feudal system, in the Declaration of the Rights of Man, and in the Civil Constitution of the Clergy,1 for these represent permanent gains; secondly, the manner in which the Napoleonic régime laid the foundation of the Europe of today. The unification of Germany and Italy, the development of the Eastern question, and the other political phenomena of this century, are usually more satisfactorily treated than any portion of continental history. I have no suggestions to make except that a consideration of the all important industrial development of our time can probably best be dealt with in considering the history of our own

This crude and hasty sketch of the possible contents of a new text-book is not intended as a guide but only as a hint of the opportunities which the subject offers when once we free ourselves from the trammels of tradition; and it would, consequently, be unfair to reject the ideas which underlie it as fantastic and impracticable because the examples given appear infelicitous, or show, as it may seem to some, a false perspective. Much thought and experimentation on the part of historical writers, will be necessary before we can hope to put into our pupils' hands a true, clear, comprehensive and vivid picture of the past.

It must never be forgotten that the pupil will rarely make any farther systematic study of the subject after he leaves school. He should not, therefore, be furnished with a scheme of classification to be filled out later, but, so far as is possible, with the results themselves. The "outlines of history," its "leading facts," as usually conceived, constitute the viaticum for a journey which is almost never taken. My whole contention may be summed up in the plea that the pupil be brought directly in contact with the living past, with the generous hope of immediate fruition.

^{*}These I have translated, Translations and Reprints, vol. i, No. 5.

THESES.

- 1. Our current text-books of mediaval and modern criminating, they are wanting in perspective, and contain which should be eliminated.
- 2. They measure the importance of past facts not by according to the traditional, popular standard of conspict
- 3. They treat historical conditions with too little s fail to furnish a rational explanation of institutions and I repugnant to our age and country.
- 4. They are conspicuously wanting in scholarship, at often inferior, secondary English sources.
- 5. European history should not be taught in our sche of past events.
 - 6. It should not be exclusively or chiefly political his
- 7. It should be so taught that the pupil shall acquire greatest achievements of western Europe during and sinc more important fields of human interest.
- 8. Transitional periods, during which a great part should not be neglected.
- 9. The institutions of the past, social, political, and system, absolute monarchy, and, above all, the church, sh
- 10. The Middle Ages, Renaissance, Reformation, and with not simply as a series of events, but per se, with th spirit and salient characters of each,
- 11. Events abould in general, be selected and 'prese clarify the pupil's understanding of the prevailing conditi conversely, "unorganizable" facts, as Mr. Spencer calls t. ries can be deduced, should be consistently omitted.





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THESES.

THE modern educational aim, being a reflex of the individualistic philosophy of the past century, is usually expressed in terms of the individual. A true appreciation of the individual's relationship demands a restatement of the aim of education in such a manner that the emphasis will be placed upon the interests of society.

Society may be defined as a group of persons permanently conditioned by natural and artificial surroundings, with a high degree of interdependence, and with ideals and interests more or less common. The psychical and moral phenomena occasioned by such a group give a corresponding reality to the expression, the social mind and character. Movement in the direction of the realization of the social mind and character is progress. The function of education from the societary point of view is to accelerate progress.

A present demand upon education as a factor in social progress is a more conscious attempt to bring about the socialization of individuals.

Socialization of the individual requires, in addition to the maximum development of the physical and mental powers, the highest possible development of social goodwill, social intelligence, and social habits.

The development of social goodwill and social intelligence implies a curriculum consciously adapted to that purpose. The approach toward an ideal curriculum involves an increasing demand upon the materia, of the social sciences. Our present deprivation of the value of religious and biblical instruction is due to deplorable public prejudice and the special incompetency of teachers.

The formation of social habits implies the organization of the school so as to provide the greatest possible number of opportunities for social action.

/F ducation has always been the attempt on the part of an external authority to develop individual personalities in the direction of a preconceived and variable good which always binds its explanation in terms of the educating power. Successful education therefore depends upon the clearness and correctness with which this good is perceived, and the availability and successful application of means for realizing it through the efficiency of the individual.

The social aim in education is the constant increase of social efficiency at such a sate as will produce the maximum development possible to the school period.

The social aim and the individual aim in education are neither identical nor antiagen stic, nor are they merely two phases of the same process.

The fundamental anothesis in the biological world between feeling and function is para, eled in the social world by an antithesis between social and individual interests.

Of the many individual powers, and the infinitude of possible pleasural e individual activities, some are helpful some harmful, to society. The task of education is

to aid the cosmical evolutionary process in eliminating the harmful interests and tendencies, and to stimulate and develop the activities and powers of especial advantage to a given stage of social development.

The completion of the individual is limited by his social life, and must be sacrificed in the interest of society, not because his own highest good demands it, but because society, the external educating power and agency, believes such a sacrifice essential to its own preservation and improvement.

Social service is par excellence rational.

The relation of the social and the individual aim in education is a relation of superiority and subordination, the primary aim being social.

Ι

THE SOCIAL AIM.

Since the founding of our free-school system, to the end, as the colonists expressed it, "that learning may not be buried in the graves of our fathers in church and commonwealth," the benefits of school education have been insisted upon chiefly from the point of view of individual welfare. What an education' will do for a boy, a girl, the man, the citizen, has been set forth with varying degrees of emphasis, and in accordance with various conceptions of the aim in education. These conceptions, it must be admitted, often rise no higher than the egoistic idea that education should result in the creation of respectable social parasites. Accordingly we find numerous persons who feel little or no compunction in enriching themselves at the expense of their fellow members in society, and specimens of the genus "dude" are found in every community. His numerous feminine counterparts have provoked the criticism that "Brilliant talents, graces of person, and a confirmed intrepidity, and a continual habit of displaying these advantages is all that is aimed at in the education of girls. Virtues that make domestic life happy, the sober and useful qualities that make a moderate fortune and a retired situation comfortable are never inculcated. One would be left to imagine, by the common modes of female education, that life consisted of one universal holiday, and that the only contest was who shall be best enabled to excel in the sports and games that are to be celebrated upon it." The existence of social parasites is due in no small degree to modern ideas of education. Such products may be expected so long as the educational aim is so intensely individual.

By education is always meant in this discussion school education.

INDIVIDUALISM IN MODERN EDUCATION A PRODUCT OF CURRENT SOCIAL PHILOSOPHY.

The habit of considering education in relation to individual welfare is, of course, a product of the current social philosophy. Individualism, whatever socialism may have accomplished, still provides in social thought the dominant idea. Christianity, and the need of independence under modern industrial conditions, have so emphasized the worth of the individual, and the laisses faire school of philosophers has so exaggerated the danger of interfering with his rights and liberties, that to many it seems both unlikely and undesirable that this individualistic philosophy should ever be displaced. No matter that in emphasizing the worth of the individual we have sometimes forgotten that an extravagant sense of this worth has led to the wildest theories of liberty and equality, theories which culminated in the blood and terror of the French Revolution, and which are today the source of anarchistic demands for the overthrow of church and state; no matter that rampant individualism is contradictory on the face of it, pretending that the part is greater than the whole, popular thought is still controlled by it. It still rules our industrial life and shapes our educational ideals. The specter of economic socialism has so frightened most of us that we are disregarding the impossibility of a higher social life without a corresponding degree of the social spirit.

Without denying the importance of the individual it may be asserted that in modern social philosophy he is unduly exalted. The egocentric theory is as unsatisfactory as the geocentric or the anthropocentric. "Man, like a cipher, is of no value when standing alone." He who looks upon his own personality as the center of all cosmical interest takes himself entirely too seriously. "The lord of creation," with all his importance and dignity, was not caricatured by the little girl when she wrote in her essay "Man is an animal that stands up. He is not very big and he has to work for a living."

It is not our purpose to deny the proper importance of the individual, nor to disparage the individual benefits which education bestows, providing these are such as are manifested in men and women in the highest sense of the terms; men and women of culture, of intellectual resource, of public spirit, of refinement, with that good taste which, as Lowell said, "is the conscience of the mind, and that conscience which is the good taste of the soul." We recognize that only individual improvement can result in the approximation of an

ideal community. Nor do we wish to pretend that there is an essential antagonism between the individual and the social aim in education The aim must ever be both individual and social. We do believe, how ever, that, as Fouillée pointed out, "the danger that, above all others, a democratic nation must avoid is the disintegration of society into units with no immediate concern but self-interest, into individuals to whom social duties and bonds are gradually ceasing to appeal," and that to avoid this danger the primary aim of general education should be the adaptation of the individual to the prosecution and enjoymer: of a social life, the elimination of all anti-social feeling, and the dese opment of sympathetic emotions. Accordingly we welcome the growing tendency to look upon education and all our political and social institutions in the light of their relation to social welfare. The dawting perception of society as the great social fact is changing the demand for individual liberty to a demand for social solidarity, the demand for individual freedom to a demand for unity. Following this tendency it will be helpful to shift the point of emphasis in our consideration of education from individual to social welfare, and to inquire what is the relation of education to the progress of societi? This is the first task we have set for ourselves in the present paper. I' will help us to see more clearly that the aim in education should be essentially social.

Before considering this question, it may be well to set before our minds as clear a conception as possible, of what society is, and what is meant by social progress.

SOCIETY AND PROGRESS DEFINED.

Society is here conceived as a unit, as a complex group of persons with a high degree of interdependence, and with ideals and interests more or less common. The closeness of the relation of individuals in a society is not everywhere appreciated. The New Testament aphonisms "We are all members one of another," and, "None of us liveth unto himself," are accepted only as the expressions of an interesting fact, not as a basis of political and social organization. Nor is the relation of the individual to society generally understood. Comte declares that his very existence is due to society, that the individual is an abstraction. It certainly is true that he owes his nature to the society in which he lives. As a recent writer has said, "Each nation and tribe produces in its children its own type of character which has

grown up in it through the influence of the physical surroundings and past history of the people. Each individual is not a new phenomenon in the world, but only one particular specimen of a race: whether he be a yeoman whose himbs were made in England, a painter whose eyes were developed in Italy, or a philosopher whose brain grew in Germany. His life is controlled both by the dead and the living among his people, He is what his fathers have been before him, except in so far as he has breathed a different air." This interrelation and interdependence being appreciated, a further fact should be recognized, namely, that soc.ety is not a dead machine, but a thing which lives and grows. There is constantly going on in society, unless it has begun to decline, a change from the simple to the complex, from the homogeneous, to the heterogeneous, which in animal organisms is called growth. Now because society is a unit that lives and grows, and whose parts, that is, its individual members and the groups into which they combine for the performance of the various social tasks, have certain relations of interdependence, we are accustomed to say that society is organic. There is no other term which so well expresses these facts and relations. This must not be interpreted to mean that society is an animal. Certain sociologists have, indeed, made the mistake of treating society in this way, but with about as amusing results as were manifested by the young student of physiology who defined the human body as consisting of three parts: the head, the thorax, and the abdomen. "The head," said he, "contains the brains when there is any, the thorax the tictual organs, and the abdomen the bowels, of which there are five, a, e, i, o and u.""

The conception of society here presented, simply regards society as a larger self, of which the individual is a factor and an expression. The relation of the individual to this larger self is similar in kind, it has been said, to the relation of the will of an individual to his character. "As will is the expression of character, so is the individual the expression of his society; but as change of character takes place only through acts of will, so the change in society takes place only through change in its individual members. And just as our wills are free, although they are the expression of our characters, so the individual has an independent life, although be is an expression of his society."

[&]quot;Society is not an organism because we may compare it to a beast of a man, but because it cannot be understood by the help of any lower, that is, less complex, conceptions than that of organism."—RITCHIE, Principles of State Interference, p. 49.

^{*} MACKENZIE, Introduction to Social Philosophy, p. 157.

This view of society as organic, which is, of course, a commonplace in sociological thought, and is presented here only as a background for what is to follow, ought to give new meaning to many familiar terms. The social mind, social consciousness, the will of the people, etc., are not figurative expressions, but terms which have corresponding realities. There is a social mind, a social will, and a social conscience to be educated, just as really as there are individual minds, wills, and consciences to be developed. While development of the social mind and conscience is, of course, entirely dependent upon corresponding changes in individuals, the realization of the social will and character is the inclusive and higher ideal. Society being a unit, we might almost say a personality, capable of development, it is obviously the function of education to aid in the realization of the social mind and character. Movement in the direction of this realization we may call progress.

This definition of progress needs some explanation, and, perhaps, defense. Our view of the nature of progress must; in part, determine our idea of the relation between it and education. If progress is wholly independent of human volition, then it is beside the mark to talk of education as an aid to progress. This, however, is the view apparently maintained by the ultra-evolutionary school of social philosophers. "Progress," Herbert Spencer asserts, "is not an accident, not a thing within human control, but a beneficent necessity." From the time of Von Baer it has been settled beyond question that organic progress is a change from the simple to the complex, or, to use the words of Mr. Spencer, from the homogeneous to the heterogeneous, and this law of organic progress, he declares, is the law of all progress: "Whether it be in the development of the earth, in development of life upon its surface, in the development of society, of government, of manufactures, of commerce, of language, literature, science, art, this same evolution of the simple into the complex, through successive differentiations, holds throughout. From the earliest traceable cosmical changes down to the latest results of civilization, we shall find that the transformation of the homogeneous into the heterogeneous, is that in which progress essentially consists," The law of progress, then, is the law of evolution. "Progress everywhere from the beginning of life," says the author of Social Evolution, "has been effected in the same way, and it is possible in no

¹ Progress: Its Law and Cause.

other way. It is the result of selection and rejection." "From time to time," he says, "we find the question discussed by many who only imperfectly understand the conditions to which life is subject, as to whether progress is worth the price paid for it. But we really have no choice in the matter. Progress is a necessity from which there is no escape, and from which there has never been any escape since the beginning of life." And again he says, "one of the commonest ideas surviving from a pre-evolutionary period is that which represents the stages of man's social progress as steps in advance, consciously and voluntarily taken. But man in making the momentous advance from a more primitive state to the first beginning of organized society must have acted without any conscious regard either to expediency or increased satisfaction, or any other of the considerations which philosophical writers have so often attributed to him. His progress was beyond doubt, the result of the conditions of his life, and was made under force of circumstances over which he had no control."

This conception of progress disregards the element of human happiness. It is purely a biological term synonymous with growth. We may admit that, so far as primitive society is concerned, progress, being wholly unconsciouss, illustrates this idea. But in a society like ours, in which a social consciousness is beginning to manifest itself, intelligence may control and direct the forces which have, in the course of many centuries, and at a great waste of energy, brought us to our present position. We may fix the goal and direct civilization toward it. Obviously, then, the function of education, from a societary point of view, is to modify and accelerate social evolution.

The question now arises, how can an education accomplish this beneficent result?

SOCIALIZATION THE CHIEF FUNCTION OF EDUCATION.

In the first place, and mainly, education may aid in accelerating social progress by a more conscious attempt to bring about the socialization of individuals. The socialization of the individual is to society, as has been suggested, the all-important object. "As a man can only reach his highest development and employ his powers to the fullest extent in society, it follows that in the evolution we witness him undergoing throughout history, his development as an individual is

*This idea of teleological or artificial progress is usually regarded as one of the most valuable contributions of Professor Letter F. Ward to the science of sociology. It is the keynote of his great work on Dynamic Sociology.

necessarily of less importance than his developmen In other words, although his interests as an indivic tant to himself, it has become inevitable that the be subordinated — whether he be conscious of larger interests with which the forces shaping h now begun to operate." * Now, as much as we ! time of Aristotle, of man being by nature a social to anyone who gives the matter serious thought being socialized in the highest sense of the term nized by Professor Ward, who says: "To call being by nature is obviously absurd. No doubt a exist among men, but they are the product of age may be in the process of becoming a social be really have become such until it shall be possible with the protective function of government. ? * classes or certain individuals refuse to recognize t to society, that is, are unsocialized, so long will th of society towards its ultimate goal. The great pro to get rid of our unsocial classes. Pobviously, th of them is to socialize them. And this may be do this should be, we contend, its main object. Alre to hear of the "ideal school as the ideal commun appears to be an exaggeration the idea is a recog bility of training children to act for others. forth from the public school with the habit of alt developed. The education which does not devela feature which, from the societary point of viimportance. Education, then, should be a cont the child, in knowledge and in habit, for the lar he soon must enter, that is, it should socialize hin an important question, namely: How can educater? This question will be more easily answered moment the essential qualities of a socialized indi

THREE ESSENTIAL QUALITIES OF THE SOCIALI

Every genuinely social being must possess, in and mental qualities assumed as essential, at least

^{*} KIDD, Social Evolution, p. 59.

^{*} American Journal of Sociology, vol. i, p. 432.

These are (1) social good will, (2) social intelligence, and (3) social habit. It may be that psychological analysis would result in the reduction of these three to one, namely, intelligence. No matter. For our present purpose they may be considered as separate elements of the socialized character. A word of explanation should be offered in regard to each. By social good will is meant the disposition to do what is socially beneficial whether such conduct is legally required or not. It is the social spirit. It implies the presence in the individual consciousness of that thought about social welfare which if present in the whole group would manifest itself in a high degree of social consciousness. Something more, however, than this willingness to perform the actions which will result in social welfare is required. It is not enough to be well disposed. The mother, for instance, is willing to make any sacrifice for her child; but the conduct of the most devoted but ignorant mother may result in irremediable harm to the object of her love. So, also, the individual, however well disposed, may, if his knowledge is inadequate, hinder the welfare of society while he is most earnestly striving to further it. This is illustrated in the numerous disastrous attempts at social reform by men whose motives are unquestioned. The will to do must be supplemented by a knowledge of what to do, and how to do it, or as above expressed, by social intelligence. By social habit is meant of course the involuntary tendency to act in the interest of social welfare which is acquired by frequent repetition of social acts. It is the product of the social spirit and intelligence; but owing to the method and importance of its formation it is worthy of separate treatment. Sentiment, knowledge, and habit then are the requisites of all truly social units, and the production of such units by means of education is to be accomplished by the successful development of these three factors. Let us consider each one separately.

SOCIAL GOOD WILL.

At first thought it may seem that social good will, the social spirit, is the same thing as altruism. But it is something more, or at least different. It involves a consciousness of society as the alter. If one were disposed to coin a word, societism might be used to signify the

⁴ This analysis was made price to reading Da. De Garmo's Social Aspects of Moral Education in the Third Vearbook of the N. H. S. in which a similar analysis may be found.

object of regard, just as egoism and altruism have been so used But after all altruism is the basis of this sentiment, and its cultivation should therefore be an object of education. Altruism or sympathy is the unifying bond of society. "In every department of life" says Phillips Brooks, "whether I look at politics, at government, at social life and the relation of ethics thereto, whether I look at religion, there is only one word which expresses the bond which binds the human race, that word is sympathy." And George Eliot has said that, "the only worthy end of all learning, of all science, of all life, in fact, is that human beings should love one another better. Culture merely for culture's sake can never be anything but a sapless root capable of producing at best only a shriveled branch." Education should be so directed as to develop this love and sympathy in the broadest sense. Too often it fosters and encourages race prejudices and class distinctions. The numerous manifestations of what has been called "Imgoism" is a reflection upon our educational system. Our race, our nationality, our class are by many supposed to be God's peculiar people. The process of creation according to some exalted minds, might be described as follows: "God made most people out of the dust of the earth, then he took some more dust and screened it, and screened it, and screened it, until at length all the impurities were out of it, then he made us?" And the expression of this feeling in regard to our people is what passes in some quarters for patriotism. Sometimes it is formulated in the pernicious sentiment "Our Country, Right or Wrong." It is responsible for much of the highly charged effervescence which periodically escapes through the safety valve of Fourth of July orations. Such self laudation simply proves that we are not so far ahead of our Chinese brethren who boast that their kingdom is in the center of the earth, and that they themselves are the sons of Heaven, as we pretend. Social welfare is not advanced by that boasting, swaggering, patriotism that unduly exalts our country, or that always wants to whip something, but by that civic or constructive patriotism whose sources of pride are in our contributions to the

Perhaps the old word Piety as used by CLIFFORD is sufficiently exact. He defines it as "that quality or disposition of man which consists in the supremacy of the fam by or tribal self as a mark of reference for motives." It differs from altrussm, "It is not the doing good to others as others, but the service of the community by a member of it, who loses in that service the consciousness that he is anything different from the community." Of course "in the highest natures the tribal self is incarnate in nothing less than humanity." See The Scientific Basis of Morals, Ch. i.

social, religious and political life of the world. This is the feeling that should be developed in our public schools; that patriousm which means pride in our best achievements, and which, with the ability to detect opportunity, looks to the future for further successes in the friendly rivalry of nations. This kind of patriousm means the development of the spirit of human brotherhood, of sympathy, of altruism, of social good will. The education which does not develop these feelings, whatever it may accomplish in other directions, is, from our present point of view, unsuccessful.

Admitting the importance of the feelings I have mentioned, the question now arises how can they be developed by education. There are two ways, first, by the provision of adequate knowledge, and, second, by leading the child to perform the acts appropriate to such feelings. The one implies a suitable curriculum, the other such organization of the school as will provide opportunity for social acts. Of these two methods I shall have something to say further on.

SOCIAL INTELLIGENCE.

Turning now to social intelligence as an object of education, we should observe at the outset that it is complex in its nature. Intelligence has been defined as intellect plus knowledge. Accepting this definition, social intelligence implies intellectual power plus such knowledge of social needs and forces as is appropriate to the influencing of social conduct. Now the development of intellect, or brain power, is largely a biological problem with which education can have little directly to do. "There are two ways" says Professor Ward, "in which intellect may be really developed, though the results can only appear in the course of successive generations. One of these is by the practical observance of the laws of heredity, or, in other words, by rational selection of the parents of each generation. The other is by an intelligent modification of the environment of individuals, such as to cause an increment of variation in each generation in the direction desired." This being true we may agree with him that "the only present practical mode of contributing anything to the development of intellect is that of supplying it with knowledge." So far then as social intelligence is concerned, the function of education is practically limited to the distribution of knowledge. We may now consider

⁵ Dynamic Sociology, vol. ii, p. 483. For a vigorous attack upon Intellectual Gymnastics as a means of increasing brain power see op. cst., chapters on Knowledge, and Education.

the distribution of knowledge as it affects, firs and, second, the individual.

Looking at the distribution of knowledge fro of view, it is obvious that it must ever be a functionserve the past accumulation of knowledge, tribute our intellectual heritage. Progress requires make the wisdom of the past its own. It is not the superior to our ancestors that we stand higher in tion than they, but rather because we stand on the build on the summit of the accumulated wisdom regard to society, then, it is one of the functions tribute extant knowledge in order to provide advancement. And this distribution should it demands the socialization of all its members, an without the general distribution of knowledge. I well as from the individualistic point of view

education should be universal.

In our common-school system we have partially ment of universality. But our educational system plete until we have realized in education a fund our democracy, namely, equality of opportunity; u the possibility of what Carlyle has called the grea dies, that is, the inability of a capable and eager an education. It was Ruskin, I believe, who said see to it that no Giottos should be left to tend she Society cannot afford to neglect the raw material our factories which may be worked up in our sch statesmen, and scientists, and therefore the chai for higher education should be open to all tho receive it. But, above all, it cannot afford to ove of education short of general the material which structure. In spite of all our boasts concerning tem I fear it may still be said of almost every ba the land, perhaps:

"In this neglected spot is laid,
Some heart once pregnant with celest:
Hands that the rod of empire might hav
Or waked to ecstacy the living lyre."

And why were these talents not developed? Simply because,

"Knowledge to their eyes her ample page, Rich with the spoils of time did ne'r unroll; Chill penury repressed their noble rage, And froze the genial current of the soul."

I need hardly call attention in passing to the fact that if education is to be universal it must be compulsory. Under modern conditions it cannot be general without compulsion. I have no sympathy with those skittish citizens who shy at the word compulsory. As the social mind and consciousness develop it will become more and more obvious that the prevention of social injury by proper education is a much more sensible exercise of social power than the punishment of the individual after the damage is done. The limitation of the function of government to the reform-school and penitentiary education of morally deformed social products is a tribute we are now paying to a purblind individualism. When this philosophy has lost something of its undeserved prestige, and has been reduced to its proper importance, the demand of society for the diffusion of knowledge, and the training of all its members, will not be denied from fear of interfering with the "sacred right" of the individual to retard social development.

Turning now from the consideration of knowledge as a mere basis for societary advancement, we have next to consider its effect upon the individual. In doing so we must not lose sight of the fact that the communication of knowledge is only a means. In spite of all that has been said to prevent the mistake, it has often been regarded as the end. Many teachers still seem to suppose that a child's intelligence is indicated by the number of facts it has been taught, consequently their chief aim is to burden the child's mind with the facts of history and the results of modern science imperfectly known and unrelated. The result is necessarily a muddling of the child's mind. Such teachers pour into the hopper a sack full of random facts and expect the examination grind to turn out the white flour of knowledge, but they are far more likely to obtain a curious, if not ludicrous, compound. If the subject be history, the result may be like the following, which is reported to be a genuine essay written by a child on the subject of Abraham Lincoln. "Abraham Lincoln was born in Wales in 1509. His father

The sand the succeeding illustrations are selected from an amusing collection made by CAROLINE B. Lekiw and published under the title. English of the is Tangle! Few teachers, however, can say that they have not been paralleled in their own experience.

was a wool comber, but Abraham did not like that trade. One di Abraham was standing by the railroad and a man by the name of Gr tue came behind and shot him. But it was not nice of him because ! shot him on the railroad." Here in four lines is an aggregation a ludicrous combination of facts concerning at least four famous me If physiology be the subject of examination they are likely to recur such startling statements as "the chyle flows up the middle of the bad bone and reaches the heart where it meets the oxygen and is purified. or "in the stomach, starch is changed to cane sugar and cane sugar sugar cane." The following pathetic attempt of a child to explain the nature of specific gravity aptly illustrates the point: "Specific Graity," said he, " is the weight to be compared weight of an equal volume of or that that is the weight of the body compared with the weight an equal volume." (When communication of knowledge is made the primary aim of education, it invariably happens that knowledge imperfectly communicated.) Tune

EFFECT OF THE DISTRIBUTION OF KNOWLEDGE ON THE SOCIALIZATION OF CHARACTER.

Bearing in mind the danger suggested, we may now proceed to consider the effect of the distribution of knowledge upon the socialization of character. In the first place, it must be obvious that meanwheldge unaccompanied by ethical feeling does not adequately propare an individual for life among his fellows. Knowledge is a two edged instrument and may be used to wound society as well as to clearway the obstacles to its progress. Criminal annals prove conclusively that there is no necessary connection between certain kinds of intelligence and the social spirit. And yet few will deny that knowledge may serve to generate social sentiment, and all will agree that it necessary as a guide to conduct. There are, then, three things to be considered: knowledge as a guide, the value of knowledge as a generator of social sentiment, and the kind of knowledge best adapted that purpose. A brief consideration of each must here suffice.

Knowledge as a guide to social conduct is, of course, indispensible Shakespeare's lines, "If to do were as easy as to know what to do etc., should not be interpreted to mean that socially beneficial action is intuitively perceived. Education, in addition to the general an practical knowledge usually regarded as most important, and which may here be left out of consideration, should provide the individual

with the greatest possible amount of knowledge about society, its history, its laws, its institutions. This suggests that from the kindergarten up to the highest grade of our public schools the subject-matter of the social sciences should be woven into the curriculum. Social study is as important as nature study, or rather it is a part of it, which, owing to the backward state of the social sciences, has not yet percolated down into the lower grades. Whatever may be said of the value of other knowledge as a guide to social conduct, it cannot be denied that knowledge about society is of the utmost importance. Unless the individual knows what the interests of society are he cannot know the sort of conduct which will advance them. It is a pretty well established principle of psychology that every idea tends to work itself out in action. Now since it is by knowledge that ideas are implanted, our educational system should seek especially to implant those ideas which when realized in action will serve the interests of society. The most prolific source of these ideas may be found in the social sciences."

As to the second point, the value of knowledge as a generator of social sentiment, it may be said that a regard for social interests presupposes a certain degree of intelligence. To sympathize, i. e., to feel with another person, involves the vivid mental representation of that other's suffering based on the expression of like suffering in oneself. The extension of sympathy to society requires a higher development of the rational faculty and a wider range of experience. "Beneath all our sentiments lies a totality of imperfectly analyzed ideas, a swelling stream of crowded and indistinct reasons providing the momentum by which we all are carried away and swept along." Thus knowledge lies at the basis of sentiment, and social good will, as was said before, largely depends upon appropriate knowledge. "There is a social and even an historical element beneath moral ideas." The question which now presents itself is, What knowledge is most appropriate to the end desired?

Before offering a remark upon the relative values of different kinds of knowledge in the development of social sentiment, we may observe that almost as much depends upon the method of education as upon the subject-matter. There is hardly a lesson that may not be made to minister to that end. "Every lesson," says Fouillée, "should commence by showing the theoretical and practical grandeur, the beauty,

'See The Place of the Political and Social Sciences in Modern Education, by EDMUND J. JAMES, Ph.D.

and the philosophical interest of the question under discussion, and its moral and social importance. And similarly every lesson should end with general, elevated, and philosophical conclusions." It sud instructions were followed, almost any sort of knowledge could if utilized in developing social feeling. And yet it will not be dene that for the purpose under consideration some sorts of knowledge at better than others. Many have thought that moral science is necularly adapted to the purpose under consideration. But Spencer, Ward, and others have quite conclusively shown that this is not the case, at least a it is usually taught. A man may know the ten commandments by hear without its modifying his disposition to break them. The familiarity of orientals with the principles of Buddha or Confucius, or the acquaintance of the Pharisees with Old Testament precepts, is not supposed to ham produced in them a superior morality. But the error of supposing that a knowledge of moral principles is peculiarly adapted to the development of social feeling is not so wide of the mark after all. Perhaps the error is due to a superiority of this class of ideas in awakening ethical feeling, a superiority which has led to a too great reliance upon them. At all events it betokens a partial recognition of the fact that knowledge to become dynamic must be accompanied by the appropriate feeling, and moral principles being expressions of this feeling, are naturally supposed to be most efficient in awakening it. The question of the relative values of knowledge in provoking feeling becomes, then, a question as to what kind of knowledge touches most nearly and most easily the emotions. Here again we are brought face to face with what seems to us the necessity of utilizing the social sciences, for there, we believe, are to be found the facts which, lying nearest to human interests, are best adapted to the production of social feeling. We shall have to admit, of course, that the teaching of the so-called humanities does not always bear out our claim. But the fault is in the method, and not in the matter of instruction. The teacher and his methods may prevent almost any sort of knowledge from generating social sentiment. All, perhaps, believe in the importance of studying our "spiritual embryology," and that the Greek language furnishes an opportunity, but how many of us grubbed through our Anabasis and Homer without dreaming of the significance of rut study until, in later years, our attention was called to it by educat onal theorists, at which time, however, almost all that we had learned of it had slipped out of our minds. The teaching of the moral and social

sciences may be just as barren of results, but the material which they present is the appropriate basis of ethical feeling.

THE TEACHING OF MORALS AND RELIGION.

It will be interesting now to consider in the light of the foregoing considerations one or two of the studies, the introduction of which into the school curriculum is a subject of debate. Take, for instance, the teaching of morals. There can be no question but that morals should be taught, whether formally or not is a question of method. This much is clear, the interests of society demand that the child be moralized. It has been said that every individual stands in relation to society as a sentinel to his army. Now a sentinel must have a trained eye and a delicate ear, so that he may catch the faintest intimation of the approach of danger. But it is just as important to the army that he be courageous, honest, sober, in order that he may correctly report the impressions he receives. So society, which receives its knowledge through individual channels, requires that the senses of every individual be trained, so that he may correctly receive impressions, while at the same time it demands that his heart be cultivated in order that he may not distort them. So far as society is concerned a blunder is as bad as a lie. A lie is but an intentional blunder. Here, by the way, are suggested the rational grounds for truthfulness.

A word may be said also in regard to the teaching of religion in the public schools. The teaching of religion is one of the great desiderata of which we are deprived by our own perverseness. Men are unwilling to distinguish, and teachers are unable to separate, religion from sectarianism. Now, we are all agreed that sectarianism should find no place in the school curriculum. But religion is a vastly different thing. Religion as a consciousness of relation to suprasensible being, and the expression of this consciousness in customs, institutions, law and conduct is so much a part of our nature and history that it ought not to be omitted in the educational process. If it is important to impart a knowledge of history as a record of man's political achievements in the past, it is also important that what has been thought and said about the great subject of religion, and the manifold ways in which this thought has found expression, should be a part of our knowledge. But this immediately raises the question as to whether the Bible should be taught in our public schools. I answer most decidedly it should; but as literature, as a high expression of

spiritual truth, and as the record of the development of the conception of a peculiar people concerning the divine nature, and not as a tetle that is to be ignorantly worshiped. As literature there is nothing to compared with it. Men and women of fine literary taste and even skeptical minds agree to this proposition. The Bible should be taud just as Shakespeare should be taught. We teach our children the history and the literature of Greece and Rome, because it is theat that we draw a large part of our own civil, literary and artistic in But is it not just as important that the history and the literature of the Jews, from whom we draw a large part of our religious life, should be part of the knowledge of every well-informed person? "Ah! but," ve say, "there is a difference. The Bible is a divine revelation, as children should be taught to reverence it. It must not meet oth literatures in the school curriculum lest it be placed on the same place and reverence for it be lost." It will be a sad day for society was its members lose all reverence for the Bible, but true reverence will not be destroyed by bringing before the mind the grounds upon which reverence should be based. If the children of our country are taugh to love the good, the true, and the beautiful, and are then shown the goodness, truth, and beauty of the Bible, their reverence may be safely left to take care of itself.

While, ideally, the Bible should be taught in the schools, there is under present conditions, a good reason why it should be excluded from the curriculum. This reason is, that our teachers are, at present unprepared to teach it. Where are the teachers who can point the child's mind to the real merits of the Bible? It must be admitted that they are not in our public schools. This is a condition for which our colleges and universities are responsible. To be ignorant of the work of Shakespeare or Milton is regarded as a mark of illiteract But ignorance of the Bible casts no disparaging reflections provided I is accompanied by a sort of mock reverence. Ignorance of the Bible notwithstanding our Sunday schools (or should I say owing to them) is widespread. We can never thoroughly appreciate the Bible and we understand more of its truth, and today we need a class of teacher who will perform for us a service not unlike that of Paul to the Greek and who, from literary preparation and insight, are able to say to w "The book ye ignorantly worship, that declare I unto you" Thi must not be understood as an attempt to exalt knowledge of relig of systems or literary appreciation of the Bible as a substitute in the teacher for personal character and religious feeling. From our present point of view, as well as from the individualistic, the greatest teaching force that can be brought to bear upon the mind of the child is, of course, the example of the teacher, the embodiment of the idea of righteousness in a person moving and acting in his presence, the word "made flesh and dwelling among men." The laws of imitation and suggestion operate as powerfully for good as for evil.

SOCIAL HABIT.

We turn now to the question of social habit. Habit of whatever kind involves a change in nerve structure. This may be most readily brought about during the youthful and plastic period of the organism. How essential therefore that in education, steps should be taken early looking to the formation in children of habits of social action. The question for our consideration is, of course, how is this to be done? Obviously social habits are to be formed as other habits are formed, that is, by constant repetition of the desirable act. "A tendency to act," says Professor James, "only becomes effectually ingrained in us in proportion to the uninterrupted frequency with which the actions actually occur, and the brain 'grows' to their use. When a resolve or a fine glow of feeling is allowed to evaporate without bearing practical fruit it is worse than a chance lost; it works so as positively to hinder future resolutions and emotions from taking the normal path of discharge." The school then should be consciously organized for the purpose of providing the largest possible number of opportunities for social action in order that the desired act may always follow the related feeling. Repetition of action is the important thing. An act often repeated may develop the related feeling. This is why the will of the teacher should guide the pupil until he can see for himself the rational grounds upon which the action is based. Those uncompromising opposers of corporal punishment who depend entirely upon the judgment of the child are leaning upon a weak support. The judgment of the child in regard to social conduct is necessarily imperfect. He should be allowed to follow it only so far as it leads him aright. To let him go further is dangerous to himself, to the school and to the community in which he is to live. The failure of so many experiments in self government is due to the mistaken idea that the child's individuality is sacred above everything else. In the interest of society

^{*} Psychology, Briefer Course, p. 147.

the development of a social nature in all the pupils should be made the unyielding idea. Corporal punishment, I admit, should be discomaged. The teacher should feel that a resort to it is an acknowledgment of failure. But given the failure it is better to apply the rid than to make the further and more disastrous failure of disorganding the school and demoralizing the pupil. If reason fail to convince the child of the error of his way, right conduct must nevertheless be secured [Even enforced action may lead to the desired habit.*]

Social habit, social good will and social intelligence, which we have now briefly sketched, may not seem at first sight to gather up al the desirable qualities which we hope to foster by education, nor to provide for the large class of actions usually regarded as indifferent to social welfare. But strictly speaking there are no indifferent actions All are to some extent social. The characteristics referred to do, therefore, when properly interpreted draw up into themselves the essentials of individual development. The ideal man and the ideal society would perfectly correspond. There would be no surplus of individuality. Ideally the social and the individual aim in education are one. But the attainment of perfection in the individual is not our present social need. What society demands is not perfection in the individual from the standpoint of his own faculties, but perfect adaptation to itself and the task of urging it forward toward the goal of its own perfection What is here contended for is that so long as the aim of education is individual, or chiefly so, conceptions of the ideal character will necessarily be distorted. While the aim in education should be both individual and social, emphasis needs now to be placed upon the latter And it is our belief that the guiding star of education should ever be the social aim, which we have already expressed by the word socialize tion.

Socialization, then, as here set forth includes all the individual aims which have been held up before the educational world. It embraces the development of character, the realization of self, and the attainment of the highest good; and it implies what the others do not namely, a conscious recognition of the social whole, and of the fact that these individual ideals can only be realized in the attainment of

may not simply intensify our tendency to do them, but may convince us of 'be necessity of doing new ones which were hidden from us before,"—ALEXANDEL Moral Order and Progress, p. 277.

the social ideal. Should education be directed in accordance with this ideal there would be a more conscious attempt on the part of the school to influence the totality of social life, to displace sordid ideals, to stimulate civic pride, and to elevate the standard of living. The social problem is largely an economic problem. Progress is in the direction of more wants, "more life and fuller." Education, therefore, should awaken among the lower classes that divine discontent that will allow no peace of mind until a higher plane of living is reached. Not that education should result in a scramble of individuals to change their condition. The eternal struggle for position, to get into the professions, to enjoy without creating, to gain the show of worth without its substance, is due in no small part to the present individualism in our education. The ascendency of the social ideal will encourage modest ideas, give dignity to no labor, vocation or profession which does not minister to social welfare. It will also make clear the necessity of supplying all schools, not only with the best technical appliances, but also with all the conveniences and adornments which make it possible for the school life to be of the highest order. The daily presentation of model living before the eyes of the young is bound to influence for better the ideals of the home."

The social ideal constantly before the teacher, the school and the community will in a word strengthen the efficiency of our educational system in guarding, maintaining and advancing our civil, political and religious institutions.

II.

RELATION OF THE SOCIAL AND THE INDIVIDUAL AIM.

Throughout the preceding discussion no attempt has been made to reduce the social aim in education to definite terms, or to define its relation to the individual aim. The reader has been left free to infer that the two aims are quite distinct, and engaged in a struggle on the field of educational ideals to determine which shall survive. If this inference has been drawn, thoughts of a possible reconciliation have no doubt presented themselves which before proceeding further it may be well to consider. At all events it will be interesting to discover whether the duality of aim suggested by the title of this paper is real or fictitious and, if real, the nature of the adjustment which must be

A Chicago mother complained of the cleanliness enforced in one of our vacation schools. She said it made the child dissatisfied with her own untidy home.

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made. We therefore turn our attention to the task of defining modelearly the two aims under consideration, and of determining the true relation they sustain to each other. As a preliminary step we may recall the usual formulations of each.

DEFINITION OF THE INDIVIDUAL OR PSYCHOLOGICAL AIM.

The individual or psychological aim in education is usually defined as the development of character, or as the harmonious development of all the human powers. "To develop in the individual all the perfection of which he is capable is the great object in education," is the of quoted expression of Kant; and perfection, according to Sir William Hamilton, means "the full and harmonious development of all out faculties, corporeal and mental, intellectual and moral." This definition of the aim of education, embodied in the idea of the founders of the Prussian national system, has been echoed by many of the German philosophers and borrowed by not a few of our own. All are acquainted with the Spencerian formula, complete living." Knowledge and training, too, have both had their day in pedagogical favor, and just now some of the disciples of Herbart are advancing the claims of interest.

It is sufficient for us to note that in all these formulas there is no apparent recognition of social relationship. All are expressed in terms of the individual. His so-called faculties, or in the later psychology his nerve centers and brain-tracts, absorb the attention of the educator. The individual and not society is the center of interest. The aim of education so expressed is properly denominated individual.

CRITICISM OF SOME DEFINITIONS OF THE SOCIAL AIM.

On the other hand the social aim concentrates attention primarily upon the social group. It makes the requirements of the civilization into which the child is born the chief consideration to which all others are to be subordinated. These requirements determine what the child

*Complete living is, according to SPRNCER, the ultimate end. The immedials sim is the maintenance of a proportion between the degrees of preparation for self-prescription, direct and indirect, parenthood, citizenship and the miscellaneous refinements of life. See his Education, p. 34, et seq.

*See the Didactic Principles of Herbart-Ziller-Stoy in the Supplement to the Third Yearbook of the National Herbart Society. HERBART, of course, makes morally the highest and necessary aim of education. Interest, "many-sided interest," is only the more immediate aim of instruction. But see his Esthetic Revelation of the World, or his Science of Education (English Ir.), ch. ii.

shall study, the habits and customs he shall be taught, the political duties he is to assume, the religious faith and spiritual aspirations he shall adopt for the conduct of his life. The pedagogical aim, therefore, should be to fit him to perform his duties in the various social institutions." This aim, which in contrast with the individual aim we may fitly describe as social, is ordinarily expressed as "the preparation of the individual for life in society." This definition, however, is inadequate. It seems to imply an impossible separation of the individual from society during the preparative process, to suggest that the individual is fashioned for his place in the social structure in much the same way that a given piece of material is prepared for its place in a building. But society unlike a building is a growing organism and constantly undergoing a change of form. If we were to educate the child today," says Professor Dewey," with reference to adapting him to a supposed state of things in the future, we should probably find, when the time came, that we had entirely missed our mark, and that the child was in no sense adapted to his surroundings." Moreover, to say of children that during the school period, when they are already in and a part of the social whole, they are undergoing a preparation for life in society, is much like saying that little fishes in the early part of their existence are being prepared for life in the water. Not preparation for a place in the social structure, but the development of a constituent element in that structure seems to be the real process of education.

Another objection to this expression of the social aim is that it sets up the goal of education as some distant good, as something external to the educational process. This is a common defect of almost all educational aims.³ Even if we admit the statement of President Eliot that the goal of the movement "is always the acquisition of knowledge, the training of some permanent capacity for productiveness or enjoyment, and the development of character," we have still a something beyond, a land ahead in which the new acquisitions and powers of the child are to have a special value. Anyone who will recall the many weary hours he has spent in studying something he could "see no sense in" will readily understand the importance of connecting the

^{*} Cf. Report of Commuttee of Fifteen, pp. 4, 5 and 6.

^{*}Unpublished Lectures on the Philosophy of Education.

See PROFESSOR DEWEY'S Pedagogic Creed.

⁴ Outlook, Nov. 6, 1897.

aim of education with the process, and of acquisition and production a present value social aim in education implies a reorganization give all its activity a social value, and in such and organize the fundamental principles of a must, therefore, find a description of it, that cation and invalidate the criticisms suggested

Among the recent writers who have emphy education is Professor Small, who says that " education is, first, completion of the individ the first, adaptation of the individual to suc society in which his lot is cast that he works at in perfecting its own type, and, consequently favorable to the development of a more perfe Here the word education is used, I take it, in a lic school education, which is the meaning to ent discussion to limit the term. In this bro that the completion of the individual is the es to be the ultimate end of all social institution But in the narrower sense in which we are using proper emphasis requires a reversal of the prin as here expressed. The education of children tarily assumed. We should, therefore, naturall est meant to be subserved is primarily social. says that "the prime problem of education . adaptation of the individual to social condition within which individuals live, and move, and this implies that the purpose or aim is prima

- 'This is, of course, implied in the Pestalozzian pr desires and circumstances of actual life the starting p led him to associate the work of the body with that o and Gertrude this latter point is most fully treated.
 - " Third Yearbook, National Herbart Society, p. 15.
 - ¹ American Journal of Sociology, vol. 11, p. 839.
- 4 The ultimate aim is the completion of the individual any particular individual. "The function of society is to create human personality,"... "the evolution of pestages until it obtains to the ideal that we name humanit Sociology, pp. 420-421.
 - 3 American Journal of Sociology, vol. ii, p. 843.

we shall try to show that completion of the individual is so far secondary that it must often be sacrificed in the interest of society, but here we need only remark that a proper formulation of the social aim must give emphatic precedence to the interests of the social group.

Other writers have incidentally given expression to the social aim, and some of these expressions we may briefly notice. Professor Ward treats education entirely from the social side, considering it merely as the initial means to the ultimate end of all social effort, namely, "happiness." As such he defines it as the "Universal distribution of extant knowledge." Knowledge, that is, acquaintance with environment, gives correct views of man's relations to the universe, which in turn produce dynamic action leading to increasing success in harmonizing natural phenomena with human advantage, that is, progress; and progress is the direct means to happiness. Thus we have the series of means by which, according to Professor Ward, the true end of happiness is to be reached. Each approximate end, he thinks, constitutes a true means for securing the next respective higher end, and, therefore, need not be pursued as an end in itself, so that, "the entire series above the initial means may be safely left to take care of itself, and the total social energy be concentrated on the initial means," that is, education.' This is not the place to consider the strength or weakness of the causal connection between the various parts of this series. We have only to notice that in so far as an aim in education is implied, it is primarily individual. The distribution of extant knowledge as the immediate aim is, when we come to apply it, in no respect different from the old and now almost generally discarded aim of imparting information.

The remark just made applies also to the aim set forth by those who have considered education in its relation to the state. From the ancient Greek philosophers to those who write for modern periodicals, we may find the value and the necessity of education from this point of view insisted upon. But usually the state is identified with the government. Whether they have affirmed, as did Aristotle, that the importance of education is derived from the consequent appreciation by the citizens of the benefits of which their government is the source; whether they have declared, as did the founders of our government, that education is necessary to qualify citizens to discover any errors in the forms and administration of government, and to point out the

Dynamic Sociology, vol. ii, chapter on Education.

Dynamic Sociology, vol ii, p. 109.

method of correcting them, or whether they have merely advocated a claims of education on the grounds of good citizenship, as many and doing today, the aim has been either individual or too narrowly would Man's relation to the state is only one of his manifold relationship. There is no more reason why the work of the school should be detected with reference to it than there is that it should limit its attention to the relation of parenthood. But, as I say, writers of this class have eiter too narrowly interpreted citizenship or they have limited the manifold among them a correct formulation of the social aim.

About as near an approach to what we are seeking as I have been able to find is contained in a paragraph written by Jane Hume Capperton. I quote the whole of it: "The primary object and aits of scientific general education is not culture, but the adaptation of individual character and habits to the prosecution and enjoyment of a socal life. This implies the development and growth of a variety of sympton thetic emotions, and the repression of all anti-social feeling, leading to the habitual extinction of, first, the passions of militancy - tyranny dominancy, herce aggression, antagonism; and, second, the predator instincts - rapacity, intrigue, cunning, selfish greed. It implies a per sistent teaching from babyhood to manhood in right conduct, i.e. and domestic and social habits as tend to general happiness in an ethica. organized state. It implies the imparting of knowledge of the ma in every department of life, and the careful instilling of noble ideals of conduct in every relation of life. Lastly, it implies the embellishment of existence by culture and the practice of every exquisite, ennobate art." Here we have "the primary object and aim of education" out clearly set forth as socialization, and yet there is little to indicate that social interests are uppermost in thought. Moreover, there is no surgestion of the identification of the aim of education with the process

A PROPOSED DEFINITION OF THE SOCIAL AIM.

Perhaps we may as well cease our search and strive to formulate let ourselves the social aim in terms that will satisfy the objections which have been suggested. But first let us inquire what education in the sense in which the word is here employed really is.

Education, whatever else it may be, has always been the attempt on the part of an external authority to develop individual personal to

¹ Scientific Mehorism, p. 431.

in the direction of a preconceived good. What this "good" is must always finds its explanation in terms of the educating power. I apprehend that no one will have any difficulty in perceiving that it cannot be the same when education is by the church that it is when it is by a state indifferent to religion. It is not likely to be the same in a despotism as in a democracy.' Individualism in education marks a stage in the transformation of this external authority from a few individuals or a class to the social organism. With the downfall of individual and class rule, individual interests become unduly conspicuous, but with the rise of the organic conception of society they gradually fall into their proper perspective. Now the conception of the unity and authority of society has developed, in this country at least, so far as to make it practically true that the external educating power is the social group, and the good toward which education must direct the individual is consequently social. Modern education, therefore, is the attempt on the part of society to develop the experience and powers of the individual so as to give them a constantly increasing social value. This conforms to the definition of education given by Professor Dewey, who says: "Education is defined as the process of the reconstruction or reconstitution of experience, giving it a more socialized value through the medium of increased individual efficiency." This definition, he claims, and the claim must be allowed, puts the meaning of education within the educative process, and in a certain sense identifies the process with the aim. The attainment of the aim is found in the continuance of the process. The social aim of education may then be defined as the constant increase of social efficiency at such a rate as will produce the maximum development possible to the school period, or if we desire to put the whole content into one word, socialisation.

So formulated, what is the relation of the social aim to the individual aim?

THE EDUCATIONAL AIM DISTINGUISHED FROM THE ETHICAL AIM.

Before taking up this question, it may be well to point out that we have here a somewhat different problem from that of determining the relation of the ethical aims of society and the individual. Ordinarily

* Cf. MONTESQUIEU. Espect des Lois (Eng. tr., p. 33): "The laws of education will be therefore different in each species of government; in monarchies, they will have honour for their object; in republics, virtue; in despotic governments lear."

^{*} Unpublished Lectures.

the problems are treated as identical, but this leads to a confusion thought for which there is no necessity. The ethical aim is ultimate the educational, proximate or mediate. The latter need not even a in line with the former. In a highly militant state, for instance the easily seen that social efficiency, the primary educational densationish be to a certain extent a negation of the ethical aim. The are is unvarying; the former changes with the exigencies of civilitate. The one demands ideal perfection; the other relative perfection then, while we shall have occasion to consider the relation of the attitudual to society, and shall thus be led incidentally to discuss the ethical aims of each, we need not confuse this problem with the case we now have in hand.

THE SOCIAL AND THE INDIVIDUAL AIM NOT INDEPENDENT

Taking up now the question of relationship, it is hardly poor that anyone would seriously contend that the individual and the serial aim in education are independent of each other. Social efficient obviously implies attention to individual development, and her ward the development of the individual could not take place without was regard to social life. In the report of the Committee of Fines (p. 5) the psychological basis of education is described as being "merely formal in its character, relating only to the so-called mental faculties," and as furnishing a "training of spiritual powers analog ad to the gymnastic training of the muscles of the body. Gymnast 3 may develop strength and agility without leading to any skill in trades or useful employment. So an abstract psychological training that develop the will, the intellect, the imagination, or the memory, but without leading to an exercise of acquired power in the interest of civilization." This is incontestable. Unless the products of education include the social spirit, the individual is educated for lumiselt and not for society. Many of our counterfeiters, burglars, bank-wirekers, boodle politicians, etc., have acquired their skill, or its rudinepts, in our public schools. And yet psychological development cannot be wholly abstract. Some reference must be made to objective standards The phrase, development and harmony of powers, has no meaning

^{4&}quot; At each step the duties and virtues of the individual are determined to be concept in of a common good; but this concept in of a common good that the grows with the progress of mankind." — RIICHIE, Principles of State Intervention, p. 106.

independently of the milieu in which these powers are exerted.' There must always be a social as well as an individual side to the educative process. "The object of all education," says Fouillée, is simultaneously individual and social," and, quoting and paraphrasing Guyau, he continues, "it is the search for means to bring the most intensive individual existence into harmony with the most extensive social life. It, therefore, has a triple end: (1) The harmonious development in the individual of all the capacities proper and useful to the race; (2) the development in the individual of such capacities as are peculiar to him, as long as such development will not disturb the equilibrium of the organism; (3) to arrest and check the tendencies and instincts which may disturb that equilibrium, i.e., to aid heredity in proportion as it tends to create permanent superiority in the race, and to resist its influence when it tends to accumulate causes permicious to the race itself." It is obvious, then, that the individual and social aim cannot be divorced. The individual phase presents itself in the necessity of developing individual tastes, capacities and powers; the social in every attempt to determine the social values of these acquired powers. To quote Professor Dewey once more, "It is not the mere individual as an individual who makes the final demand for moral action, who establishes the final end; or furnishes the final standard of worth. It is the constitution and development of the larger life into which he enters which settles these things. But when we come to how the individual is to meet the moral demands, of how he is to realize the values within himself, the question is one which concerns the individual as an agent. Hence it must be answered in psychological terms." 3 The fact appears so obvious that without further discussion we may safely assert that the aims we are discussing are not independent. Are they then identical?

THE SOCIAL AND THE INDIVIDUAL AIM NOT IDENTICAL.

At first sight it may appear that since there can be no education, no development of powers, without both individual and social considerations, the two aims are one, that, psychological development implies social adaptation; completion of the individual, the maintenance and advance of all that is valuable in social life. But upon closer inspection we shall find that such is not the case.

^{&#}x27;Cf. REIN, Outlines of Pedagogics, p. 68; also Provesson Dewey's Pedagogic Creed.

^{*}Education from a National Standpoint, p. 14.

³ Herbart Society, Third Yearbook, p. 10.

In the first place we must not be misled by what has just been said about the inseparable connection between the social and individual phases of the educational process. It is true that they are opposite sides of the same thing, the obverse and reverse of the same coin. But this has nothing to do with the aim in education. An education is vice, for instance, would necessitate due observance of social criteris for the powers developed. It could not be exclusively individual as to process. And yet we may safely assume that in the school for thiever and pickpockets, discovered by the police sometime ago in Chicago the aim was strictly individual. And so we see that we have settled nothing in regard to the relation of the social and individual aims it education when we have discovered that it is impossible to sever the psychological and social sides of the process.

In the second place, the assumption that a conscious attempt a securing the completion of the individual in terms of his own powers is the best way to bring about social progress, and it is therefore immaterial whether we make the aim individual or social, that they both come to the same thing, is, in our judgment, as has already been suggested, incorrect. For, if individual perfection be the object strived for, the school must provide in our imperfect civilization an artificial environment in which all these qualities of perfection may have their value and flourish. But some of the products of this environment will not bear transplanting in the uncongenial soil of actual life When the school surroundings no longer exist, when this perfectly rounded character finds himself thrust out into the new environment of an imperfect social life, he finds that he is unprepared for it, that he is a round peg in a square hole. No part of his nature has been neglected, all his powers have been harmoniously developed, but he finds that he has got to make a living, for instance, in an intensely bitter struggle for existence, and some of his qualities are found to be a hindrance rather than a help. He strives unsuccessfully to succeed may even want to give a pull at the chariot of progress, but there is no place where he can hitch on, and no harness to fit. With all his equally balanced powers he finds himself a failure. Society has no place for him. (In short a perfect individual in our modern social environment would be a monstrosity. Such a being has never existed. Even Christ has no claim to perfection on the basis of anything else but adaptation to the task he performed.? What society needs today is individuals who are especially strong in certain qualities, abnormally developed if you please, who will influence social life in particular directions, lifting up in their own characters, and magnifying, the missing elements in social well being, and drawing all men unto them. When the life of the Jewish nation had become cold and formal, narrow and selfish, hard and cruel, it was an anchorite living in the wilderness on locusts and wild honey, who was best adapted to the task of assisting them in realizing their true needs. Luther, in Germany, John Knox, in Scotland, great men everywhere, illustrate the fact that individual completion and the highest possible social service are not necessarrly concomitant. Social efficiency demands conformity of individual capacities and powers to a state of imperfection, to a division of labor determined by the stage of civilization. Like the cells of a biological organism, therefore, the individual must sacrifice his own completion to the needs of the whole. Narrow specialization, though fatal to individual perfection in the ordinary sense of the term, often best subserves the interests of society. Education must always recognize this, and this recognition implies that its aim must ever be primarily social. All this is but to say that the school must always recognize the fact that it must bear some sort of relation to the civilization in which it is placed."

SOCIETY AND THE INDIVIDUAL.

But the necessity of sacrificing individual completion to social progress will be denied by some. It will, therefore, be necessary to look rather closely at the question which is continually arising in all social and philosophical discussion, namely, the question of the relation of the individual to society. The bearing of this question upon the main problem we are discussing is almost obvious. If the interests of society and the individual are one, then it is immaterial whether we emphasize the one educational aim or the other. If they are opposed it then becomes a question of values. If they are neither identical nor opposed another solution of our main problem will be suggested.

'Among those who have clearly recognized the necessity of sacrificing individual completion to the good of the race is SCHILLER, who points out that the Greeks "were of oged to renounce the totality of their being, and to follow different and separate roads in order to seek after truth." "I will readily admit to you," he says, "that, although this splitting up of their being was unfavorable for individuals, it was the only road open for the progress of the race." Though unfavorable to the individual, there is still some compensation, for, as SCHILLER himself says, the individual in the exercise of special aptitudes gains in depth what he is permitted to lose in extension. See Authorical Letters, pp. 40 and 42.

Every student of ethics knows that throughout the history of thought the relation of the individual to society has engaged the atter tion of the profoundest thinkers, Plato and Aristotle, the Chastar fathers, the leading scholastics of the middle ages, Kant, Hegel, Hobber Hume, Locke, and other great intellects being among them. tor remarks on the subject by the present writer may, therefore, seem . at a piece of presumption for which an apology is required. I have on i to say that in the present discussion the question cannot be avoided In fact it underlies all ethical, social, economic and political theory In all discussions of this kind some solution of this question must be accepted, arrived at or tacitly assumed. It is my purpose to set forta briefly the solution which seems to me on the whole most satisfactory My form of presentation is new to me, though I dare say others have put the matter in the same light. It will hardly be denied that treatment of the subject is often vague and inconclusive. Some have thought to dispose of it by reducing the individual to zero. Doubt less it is true that so far as the rational human being is concerned be has no existence apart from society. But everyone, I think, feels that whatever he may be he is in the presence of an objective order to which he must in some manner adjust himself. In Hegelian phrase ology there is a self and not-self, and neither philosophy nor logic can rid one of the feeling of this duality. It may be shown that what we call the subjective is in its essence social, or that the social exists only in the medium of individual consciousness, but that does not so we the difficulty. What the individual essentially is in his nature is an important psychological question, but sociology is chiefly interested in his attitude toward society. Not what he owes society, but how much he is willing to pay is the subject of immediate social concern Others have shown an ideal identity of interests between the individual and society, and disregarded the actual negation of this identity by the conduct of a large majority of the race. Of what use is it to assert that the interests of a selfish and grasping monopolist, for instance. are identical with those whom he despoils. Perhaps they should be but that proposition should be carefully discriminated from the state ment that they are. Even when we read Emerson's lines,

Let Love repine or Reason chafe,

There came a voice without reply,

lis man's perdition to be safe

When for the Truth he ought to die.

and apply them in any concrete case, we know that there are many whom "the voice" never reaches, and who fear no perdition except that which society will make for them for a neglect of social duty. If it be said that such persons have no adequate conception of their true interests, I answer that clearness of thought demands that we carefully distinguish their actual interests from what those interests might be. The interests of an individual vary with the extent of his personality. Still others, recognizing the perpetual struggle going on between subjective self-will and the obligation of an objective order, and "between the wants of an individual and the mechanism of ordered political life by which these wants are not all satisfied," overlook a possible reconciliation, and thus leave us with the feeling that a part of the problem has been neglected. We shall strive to avoid this neglect as well as the vagueness to which we have alluded.

THE IDEALISTIC SOLUTION OF THE PROBLEM.

Perhaps it will aid us in getting at the problem if we consider for a moment the solutions accepted by different schools of thought as formulated by some of their representatives. Let us begin with the writers of text-books on ethics. "A being who, like man," says Muirhead, "is a little higher than the animals, a little lower than the angels, can only realize his own life in so far as he realizes the life of the society of which he is a member. To maintain himself in isolated independence, to refuse to be compromised by social relations, is the surest way to fail to realize the good he seeks." And another says, "We can realize our true self only by realizing social ends. In order to do this we must negate the merely individual self, which, as we have indicated, is not the true self. We must realize ourselves by sacrificing ourselves.3 Here we have, of course, the paradox of Christian ethics, "die to live," "he that loseth his life shall find it." Those who support this view are fond of tracing through all nature a law of sacrifice, but they do not seem to realize that such a law cannot be its own explanation. A similar solution is reached by many of those who approach the problem from the side of social science. Observing the relations of interdependence existing in society, they come forward with the declaration that social solidarity unifies all interests and is the rational ground for

¹ LOTZE, Microsmos, vol. 11, p. 97.

^{*} Elements of Ethics, p. 160.

¹ MACKENZIE, Manual of Ethici, p. 276.

all moral conduct. "As you are a part of hun your prosperity, and its sufferings your suffer which is good for humanity, you do good to 1 that which is injurious to it, you inflict an inju flourishing humanity is your paradise, a decaying The poets have said as much; Lowell, Mereditl And the best that can be said for it is that it is not truth. For, as a recent writer has said, "it that we thrive only when the group thrives; th in a network of social relationships, we cannot for body fares ill; that labor for the corporate dividends. . . . The lot of the individ from the fortune of the group for him to sn: just as the capitalist may profitably steal a fra raises his taxes thereby." This so-called us particular individual interests in the idea of sacri or of social solidarity, may be said to be the ph solution of the problem. The trouble with it is reality. It is too much in the air. It neglects able facts of real life.

THE BIOLOGICAL SOLUTION OF THE

As opposed to this solution, we may quote a from a book which recently provoked a good refer to Kidd's Social Evolution. In a chapte Sanction for Progress, he says, "There emerges a fundamental principle that underlies that so has been in progress throughout history, and wl accelerated pace in our modern civilization. It ment the interests of the individual and those to which he belongs are not identical. The test individual must always be that the present tim therein are all important to him. Yet the for out our development are primarily concerned of the individual, but with those widely differe organism subject to quite other conditions indefinitely larger life. These latter interests a

³MAX NORDAU, quoted by E. A. Ross in American iii, p. 504.

^{*} Op. cit. p. 506.

greater than those of any class of individuals: they are greater than all the interests of any single generation. Nay more, as we shall see, they are greater than those of all the individuals of a whole series of generations. And in the development which is in progress it is a first principle of evolutionary science that it is these greater interests that must be always paramount. The central fact with which we are confronted in our progressive societies is, therefore, that the interests of the social organism and those of the individuals comprising it at any time are actually antagonistic; they can never be reconciled; they are inherently and essentially irreconcilable." Mr. Kidd then concludes that there is no rational sanction for conduct performed in the interest of society. This view in contrast with the idealistic solution of the problem may be called biological, for it is usually held, I believe, by those who approach the problem from the biological side. As the idealistic solution has too slight a regard for reality, restricting itself to a possible future, so the biological solution hovers too near reality. It regards quantity of life rather than quality. It is based upon a too narrow utilitarianism. Is it possible to synthesize these two views into a harmonious and rational one embracing the truth of each and avoiding its errors? We believe it is, and that in this higher synthesis we shall see more clearly than ever that the chief task of education is to bring about a real identity between individual and social interests, and that the individual aim must ever be subordinated to the social.

THE ANTITHESIS BETWEEN FEELING AND FUNCTION.

To begin with, we do not believe that it can be successfully denied that there is in general, and that there always has been, a fundamental antagonism between the individual and society. To set this forth in the clearest possible manner it will be necessary to go back beyond the origin of society and consider the biological development of organisms irrespective of their relations to one another. We shall there find that in the genesis and development of feeling as an aid to function, that is, to the preservation, perpetuation, and improvement of the organism, there is no necessary connection between the two. Or in other words, there is no causal relation between a given pleasurable or painful sensation, and the result it accomplishes in preserving, perpetuating, or perfecting the organism experiencing it. And yet pleasurable sensations, or the avoidance of painful ones, which amounts to the same thing,

PROFESSOR LESTER F. WARD, Dynamic Sociology, vol. 11, p. 121.

is the sole motive of the creature to action. Its aim is the widest possible range of pleasurable experiences. Some of these experiences are sure to conflict with its own preservation, perpetuation, and improvement, which may be called the end of nature. That there exists at any time a sort of harmony between the end of nature, i. c., preservation, perpetuation and improvement, and that of the organism, i. e., feeling, is due solely to the fact that only those creatures which have found pleasure in actions which minister to the end of nature have survived. "It is not generally perceived," says Professor Ward, "that there is a strong tendency to depart from it" (i. e., this harmony). "The organism itself bas no reason for maintaining it. Its end being feeling, it has no motive to pursue other ends. If, in a changing environment, it is impelled to perform acts that are opposed to its safety or that of its race, it will perform them in harmony with the inexorable law of its nature. The penalty for such acts is extinction, and this has, in fact, been the fate of millions of beings. The organic world has developed under a law which may be called the elimination of the wayward.' A special illustration may help to make this plain. Take for instance the phenomena of nutrition. Why does eating result in preserving and building up the tissues of the organism? Obviously it is not because the organism is aiming at such an end. Its sole aim is the satisfaction derived from the process. In pursuing this aim it may, and often does, take into the system material which is injurious. The fact that the number of instances in which it does so are comparatively few only means that in the cosmical evolutionary process the variations in its gustatory apparatus and that of its progenitors have been in the direction of functional activities. The answer, then, to the old question, Do we live to eat or eat to live? is that we do neither. We eat because we find a satisfaction in so doing, between which and living there is no necessary connection. An act may produce pleasure without necessarily ministering to function.

A PARALLEL ANTITHESIS BETWEEN INDIVIDUAL AND SOCIAL INTERESTS.

If this fundamental antithesis between feeling and function is admitted, we may now pass to the genesis of society, where we shall find the beginning of an antithesis in every way parallel. The aim of the individual is still enjoyment; that of the new social organism can be nothing less than its own existence and improvement. If to find

^{&#}x27; International Journal of Ethics, vol. viii, p. 176.

enjoyment the individual follows the blind impulses of his own nature, obviously society is impossible. Of the infinitude of possible pleasure producing activities, only a certain class are advantageous to society. These must be secured. The very beginning of society therefore institutes a conflict between group interests and those of the wayward individual. If society is to be preserved, perpetuated, and improved, some harmony must be brought about. This is accomplished, as before, by the elimination or modification of the wayward, in which nature is assisted by the penal and other artificial regulations of society. The gradual perfecting of this harmony has marked the progress of civilization. Until it is complete there will always be what may very well be called a conflict between society and the individual.

I know what will be said to all this: that the antithesis between feeling and function was just because the organism did not realize its true interests; that the maximum amount of feeling was only possible through functional activity, and that in the case of society and the individual, waywardness was proof of shortsightedness. But while we believe that this reply overlooks the fact that mere duration of life does not imply maximum enjoyment, and that individual interests are for the moment, as it were, and are based upon a narrow personality, while social interests are for the ages, we need only say that all we desire to insist upon is that the antithesis, such as we have presented, did and does now in fact exist. The individual's interests, as most individuals are now constituted, do not in any sense coincide with those of society. They can only be made to do so by extending the personality of the individual so as to include all social interests. The identification is not actual but potential. The antagonism, then, which Mr. Kidd posits between the individual and society does not imply, as some of his critics allege, "a conception of society as a mere aggregate of absolutely severed selves, ignoring the common life or treating it as something separate from the life of the individuals, and requiring a separate provision for its sustenance." All that is necessarily implied is that the widest possible play of pleasurable human activities is inconsistent

¹ Cf. Schiller, Esthetical Letters, p. 34: "If the subjective man is in conflict with the objective, and contradicts him in the character of a people, so that only the oppression of the former can give victory to the latter, then the state will take up the severe aspect of the law against the citizen, and in order not to fall a sacrifice, it will have to crush underfoot such a hostile individuality, without any compromise."

^{*} See American Journal of Sociology, vol. i, p. 302.

with social life. In asserting the impossibility of a reconciliation of individual and social interests, however, Mr. Kidd neglects the possibilities of natural evolution, assisted by the contrivances of society a modifying the activities and interests of the individual. The contribution only until the influences of social discipline and educate have developed in the individual a feeling of social unity so strong that any form of unsocial conduct will produce in him more pain the happiness.

THE RATIONAL SANCTION OF SOCIAL SERVICE

In the last remark the reconciliation between individual and social interests which we have had in mind, and the part which education to play in realizing it, are so plainly implied that further expansion to the thought may seem unnecessary. And yet, unless I am decayed very few of those who have written upon the subject of social served have a very distinct idea as to why the individual should street promote the general happiness. They have either accepted the procept on authority, or unable to find any rational sanction for social conduct, have declared the necessity of frightening the individual tract against his interests by threatening him with some injection force. A few words may, therefore, be added to bring into clear light the fact that social service, or in other words the identification to the interests of the individual with those of society, rests upon as soil a rational basis as any other conduct whatsoever.

The great commandment to all men is still "that ye love or another." But everyone must admit that this injunction cannot be obeyed merely by an exercise of the will. Moreover, it needs to a interpretation in order to rationalize it. Its correlative is "serve another," but the question remains, why? The answer takes es a once into psychology. It is a principle in that science that every ide or feeling tends to manifest itself in action, and the performance of any activity tends to develop the related feeling. Let an idea one dominate in the mind, "let no other ideas succeed in displacing it and whatever motor effects belong to it by nature will inevitable on a test impulsion, in short, will be given to boot, and will manifest total as a matter of course." And so on the other hand if a given total

^{&#}x27;John, 15:12, 17.

^{*}Galatians, 5 - 17.

¹ JAMES, Psychology, p. 448.

of action is begun gratuitously, and persisted in, the related feeling will by and by be developed. Effort and idea may either be used to call forth the other. This being true, love and service are related as mutual cause and effect. Develop a feeling of sympathy for others and the impulse to serve them appears. Serve others by sheer force of will and sympathy will soon manifest itself. The command, then, to love, and serve one another, or in other words, to promote the happiness of society, is at bottom simply this: Extend your interests, enlarge your personality, for by so doing you increase your capacity for pleasurable experiences. An individual who truly loves another has made the interests of that other his own, and has thereby doubled his possibility of happiness. The service of that other is justified on purely utilitarian grounds. He is in a very real sense serving himself. And so with the service of society. He who has developed a perfect feeling of unity with society would never think of, nor desire any beneficial condition for himself, in the benefits of which others are not included. He has built up within himself a mass of feelings which the violation of any social interest would compel him to break through, and which would afterward have to be encountered in the form of remorse." The ultimate rational sanction of his conduct, of all altruistic effort, in fact, is just in this, that it ministers, or will minister, to his own satisfaction.

We have now seen that the relation of the individual to society is neither that of an irreconcilable antagonism nor that of a natural and necessary harmony of interests, but rather that of a being with a multiplicity of possible activities only some of which are socially advantageous, and who is to be disciplined and educated until his impulses are in harmony with the needs of society. In undergoing this discipline and education, he need suffer no loss of happiness, for the resulting extension of his interests and his personality may more than compensate him for the loss of happiness due to the restriction of his conduct to a particular class of activities. It follows that for his own good, as well as for the good of others, his interests must be secondary, he must yield himself to discipline, he must recognize that his rational relation to society is that of subordination.

The bearing of this conclusion upon the relation of the social and individual aim in education is apparent. It reveals the primary task

^{*}See MILL, Utilitarianism, p. 31.

º Ibid., p. 27.

of education as that of assisting nature in developing the social, and eliminating the unsocial impulses. The performance of this task is accomplished through the extension of interest in the right direction. Individual faculties and powers must receive due attention. Society must avail itself of all special aptitudes that will subserve its interests, and must, therefore, raise them to their highest power. The individual aim must not be lost sight of. But the first great demand is progress-toward a union of interests. Moral education is of primary importance. The relation of the social and individual aim in education is, therefore, one of superiority and subordination. The primary aim is social.

'The Herbartians, in their doctrine of interest seem to overlook or at least to lay too little stress upon the question of values. Perhaps they do not see that the development and expansion of interests should be accompanied by an atrophy and communion of interests. If the interests and activities of the unsocialized individual be represented by a circle, a section of this circle will represent those that are socially advantageous. Now the process of education is the enlargement of this section, which cannot take place, of course, without a decrease in the remainder of the circle. The illustration is not complete, however, unless we suppose that the arc of the section representing socially beneficial activities is continually lengthening its radius.

THE NATIONAL HERBART SOCIETY.

- t. Purpose and Plan of the society.
- 2. Conditions for membership. Local clubs.
- 3. List of Yearbooks and Supplements published.
- 4. A carefully planned course of study in the pedagogy of Herbart, with definite references to leading books by chapter and page.
- 5. List of books referred to in the course of study, with publishers and price.

PLAN AND PURPOSE.

The National Herbart Society was established for the purpose of securing a scientific study and discussion of leading problems in public education. It has thus far published five Yearbooks with their Supplements, and has contributed largely to deepen the knowledge and interest of teachers in important questions.

It is the purpose of this society to secure the ablest treatment of these topics in the Yearbooks, and a free and full discussion of them from every important standpoint. A Yearbook is published and distributed to the members in June of each year, about a month before the meeting of the National Educational Association. A Supplement is also published and sent to the members before the meeting of the Department of Superintendence in February of each year.

CONDITIONS FOR MEMBERSHIP.

The society desires the regular membership of all teachers and others who are interested in the questions discussed. Membership costs one dollar per year for each person, and entitles the member to one Yearbook and Supplement. Previous Yearbooks and Supplements may be had at the same rate.

LOCAL CLUBS.

Many local Herbart Clubs have been formed throughout the United States for the study and discussion of the Yearbooks and Supplements.

Where a local club of four or more persons is organized the fee for each person is 75 cents per year. In such cases the organizer of the club will remit the fees to the Secretary and receive the Yearbooks for

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"Training for Citizenship," E. J. James, C. C. Van Lee, J. S. Jenka, Frank McMurry, Louis Galbreath, H. M. Slanson, J. T. Bright, Frank Dixon.

Second Supplement for 1897 -

"Observation and Apperception," Arnold Tompkins.

"The Apparation of the Principles of Herbart to Secondary Schools"
[Or. Frick and Dr. Friedel.

Fourth Yearbook.

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"Kunwledge, Will, and Conduct," James Seth.

"Social Function of United States History,' John Bach McMaster, Frank Blair, M. S. Brumbaugh.

"Social Function of Geography," Spencer Trotter, W. M. Davis.

Supplement for 1898-

"A Course of Study in Geography for the Common Schools," C. A. McMurry.

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The following carefully planned Course of Study in Herbart's Pedagogy is designed for those teachers who wish to make a regular study of this subject. It contains in a natural and systematic order the outline of the chief doctrines of this school with definite references by chapter and page to the leading books in English.

- t. The Biography of Herbart. Chapter II of DeGarmo's Herbart and the Herbartians. Felkin's Science of Education (Herbart). Introduction by the Translators, pp. 1-23.
- Most writers on Herbart, both in Germany and in this country, divide the
 work into three parts: (1) The psychology of Herbart. (2) His ethics.
 (3) His pedagogy. The reason for this is the distinct purpose in
 Herbart to give pedagogy a scientific form by basing it upon psychology
 and ethics.
- 3. The Psychology of Herbart. A full and clear exposition of this topic is found in Felkin's Chapter I of his Introduction to the Science and Practice of Education, pp. 1-53. See also Chapter III of DeGarmo's Herbart and the Herbartians, pp. 23-46. Also Ufer's Part I, of the Pedagogy of Herbart, pp. 1-33.

4. The Ethics of Herbart. Felkin's Introduction Chapter II, pp. 54-79. De Garmo's Herbart and the Herbartians, Chapter IV, pp. 47-56. Ufer's Pedagogy of Herbart, Part II, pp. 34-53.

 The Aim of Education and Educative Instruction. Science of Education (Herbart). Translated by Felkin, pp. 78-121. Introduction to Herbart, Felkin, Chapter III, pp. 80-90. Third Yearbook. Moral Education, by John Dewey, Charles DeGarmo, William T. Harris, and John Adams.

6. The Doctrine of Interest. Introduction to Herbart by Felkin, Chapter III, pp. 90-103. The Science of Education by Herbart, Second Book, pp. 122-199. Herbart and the Herbartians, DeGarmo, Chapter V. pp. 57-67. Interest as Related to Will. Second Supplement to First Yearbook, John Dewey.

7. The Doctrine of Apperception. Lange's Apperception, translated by the Herbart Club. DeGarmo's Herbart and the Herbartians, Chapter VI pp. 166-179.

8. Correlation. Herbart and the Herbartians, Chapter IV, pp. 113-12.
Chapter IV, p. 240. First Yearbook, Concentration, Frank McMurr

Second Yearbook, E. E. White, with reply to the same.

9. The Culture-Epoch's Theory. Introduction to Herbart. Felkin, Chapter III, pp. 121-145. First Yearbook, C. C. Van Liew. Second Yearnook Herbart and the Herbartians. DeGarmo, Chapter III, pp. 10-112. Lange's Apperception, pp. 110-127.

to. The Method of Instruction. The Formal Steps. Herbart and the Herbartians, Chapter V, pp. 130-140. Ufer's Pedagogy of Herbart pt 81 91. Introduction to Herbart, Felkin, Chapter III, pp. 105-120. The

Essentials of Method, DeGarmo,

11. Government and Discipline. Moral Character. Introduction to Herbar Felkin, Chapter IV, pp. 155-175. The Science of Education, by Her

bart (Felkin). Third Book, pp. 200-268.

Distinguish between the two books, (1) Introduction to the Science and Practice of Education, and (2) The Science of Education. The farmer is a much simpler and easier introduction to Herbart. The latter is a translation of Herbart. Both books are by Mr. and Mrs. Felkin.

LIST OF BOOKS ABOVE REPERRED TO.

- 1. Introduction to the Science and Practice of Education by Herbart By Henry M. and Emmie Felkin. Published by D. C. Heath & Co. Price \$1,00.
 - 2. Herbart and the Herbartians, by DeGarmo. Scribners, Price, \$1 32
- 3. Science of Education, by Herbart. Translated by Felkin. D 4. Heath. Price, \$1.00.
 - 4. Lange's Apperception. D. C. Heath. Price, \$1.00.
 - 5. Ufer's Pedagogy of Herbart (Zinser). D. C. Heath. Price, 60 cests.
 - 6. The Yearbooks of the National Herbart Society.

NOTICE.

We desire as many as possible regular members continuing from year to year to whom the publications of the society will be regular sent without further notification. Those desiring such membership should notify the Secretary.

CHARLES A. MCMURRY,
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Chicago, Illinou.



SUPPLEMENT

TO THE

FIFTH YEARBOOK

OF THE

NATIONAL HERBART SOCIETY

FOR 1899

COMMERCIAL EDUCATION

TRAINING OF BUSINESS MEN AS A BRANCH OF TECHNICAL INSTRUCTION

B۷

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PREFATORY NOTE.

The essay here presented is the outgrowth of the work of a year and a half in the Course in Commerce of the Philadelphia Central High School. In July, 1898, the writer was chosen to direct a commercial-education experiment, and found himself confronted by a most perplexing confusion. There was a vague, unmistakable cry of dissatisfaction, an expression of desire for changes in secondary education; but, so far as this concerned commercial training, there was a striking disagreement as to aims and possibilities. On the one hand, it is held that the instruction of the high school of commerce should be limited to the technicalities of business routine, while, on the other, it is thought possible for such a school to turn out a man trained so as to be able to assume the direction of foreign commerce. The truth does not seem to lie with either extreme, but to determine where it does lie is a different matter. We had not experimented long before it seemed necessary to regard the education on which the high school rests, as well as that which is above it. In the following pages the discussion is not limited to the high school, though it is the point of departure and has been kept most in view. We have attempted to run a new line through an unexplored field, and this essay is a statement of some things that seem to be tolerably well fixed; the most that is hoped for it is that it will "blaze the way," indicate some of the material, emphasize the difficulties.

Commercial education in this country is just entering on its formative stage, and the next few years are to be its critical period. Let us not deceive ourselves with the comforting thought that there is no problem, or that it is easy of solution. Our higher schools are too isolated from the community which supports them and for which they exist; higher training of school and college, to a larger number, as a preparation for participation in social activity is an imperative demand that can be met only by rational changes in the present aims and methods of education. School and college must conform to an education "of the people, by the people, for the people." The question that commercial education asks today is: How make students "learn for life" while at school? Its aim is to emphasize the dignity of vocation; it seeks to harmonize in some measure training for life and training for livelihood. As pointed out by the English special commissioner, the task is not so simple as it looks at first sight.

All good friends of higher education should hail the advent schools of commerce. Those who have opposed existing higher school on grounds of their separation from the community find in schools commerce their answer, for these are people's colleges, an expansion and extension of the elementary schools, and a preparation for life Future business-men will in these schools get the training from which they will regard their life-work as an end in itself, as well as a meato an end. Under instruction of schools of the new type, industry and trade will be raised to a higher level; the business-man will be less of a machine, and industrial society regarded, as in truth it is, a society institution. Schools of commerce can give more of the spirit which finds pleasure in business directly and which seeks to do good in dail life The demands of the present are for a more efficient busines man, a smaller percentage of business failures, a more intelligent deve tion to business as an occupation - demands which can be met only d special schools. Competition, internal and external, forces the issuiupon us; the trend of events is unmistakable; society is preequinently industrial and economic, and our education must reckon with the predominant institution. Provision is needed to fit for an economic cities zenship. A word of caution: Let those who make this provision see to it that they defile not the sacred temple of learning; let them beware lest they commit crime in the name of educational progress

The writer is pleased to acknowledge help from many persons whose names appear in notes, but more particularly does he wish to thank Mr. Michael E. Sadler for his valuable contributions to modern education, and his kindly aid in furnishing information on special points. Of those on this side the obligation is greatest to the distinguished president of Harvard University, who, more than any other, is an educational leader in this country, and to Professor Edmund J. James. There has been a conscious effort to regard American education with the hope that this essay might prove a supplement to Professor James' study on Education of Business Men in Europe. A brief review is made of the recent changes in foreign commercial education, so that again it is hoped that this may supplement Professor James' work. Parts I, II, and IV of the essay were given as fectures before the Department of Education at Cornell University.

PHILADELPHIA, New Year's, 1900. C A H

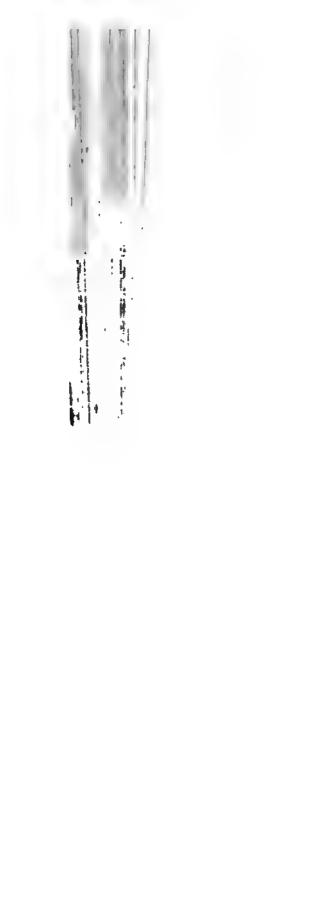


I.

BUSINESS EDUCATION A DEMAND OF THE TIMES.

".... to write now the reforming of education one of the greatest and noblest designs that can be thought on, and for the want whereof this nation perishes, "

—MILTON, "Tractate."



BUSINESS EDUCATION A DEMAND OF THE TIMES.

PRESENT INTEREST IN EDUCATION AND THE DEMAND FOR A NEW ELEMENT.

One who wishes to be taken seriously hesitates to speak with confidence concerning the educational character of a past epoch, or the educational tendency of the present. Education is a many sided social phenomenon, and a statement concerning any element in it is not without grave difficulties.' In truth, "he is a bold man who attempts to formulate definitions in the present state of educational thought." A recent remark of Bishop Creighton, that the English public is ignorant and indifferent on educational matters, gave the London Spectator an opportunity to remind the English of Lowell's arraignment of our own educational system: "The United States is the most commonschooled and the least educated nation in the world." Educational conditions are not less hopeful abroad; they have changed for the better at home. The London weekly is likely correct in its statement that the English are running the Americans "hard" for the distinction that Lowell gave us among the nations.

Educational progress for thirty years has been mainly along the lines opened up by scientific achievement. There has been in this period gain from scientific schools directly, as well as from the indirect influence that these institutions have exerted on other branches of education. No doubt the impulse for technical education came in part from the national land grants of 1862, but technical and industrial institutions have multiplied chiefly because there was a demand for the

[&]quot;Since education is capable of no such exact definitions of its principle and no such logical treatment as other sciences, the treatises written upon it abound more in shallowness than any other literature. Short-sightedness and arrogance find in it a most congenial atmosphere, and uncritical methods and declamatory bombast flourish as nowhere else."—Rosenkranz, Philosophy of Education, p. 9

^{*} London Journal of Education, August, 1898.

December 24, 1898. Bishop Creighton's statement is not in harmony with the Report of the Royal Commission on Secondary Education (1895). See Vol. 1, pp. 15, 16.

doction, with more intense competition, has made it imperative the new methods of manufacture and organization be adopted, and rdution, among other things, has given itself to the application of social to industrial processes.\(^1\) Technological and allied schools have, a rever, confined themselves largely to problems of production; but a production needs distribution and exchange to make consumptor effective, so the special training demanded by the present is not given in existing technical schools\(^2\) Life in this epoch is scientific, it economic, but more narrowly, and for a large element in the coaminity, it is commercial. Business now means more than a rule of thumb, it is complex, intricate, scientific, and those who are to engaging it not need a different equipment than has hitherto been thought sufficient for the business man.

So much is true if we have to do only with our internal affairs, but trade is international in its complexity. In a peculiar manner recent events have given to this question new significance. For good or in we have been abroad, assumed new responsibilities, and allied ourselve with new interests. We are no longer insular, protective tariffs are not to be the chief corner-stone of our future prosperity, we are in the world of the open door, of free competition. Again, a likeness must

*See FRANCIS A WALKER, "Place of Schools of Fechnology," Administrations Review, October, 1891.

***Commerce, the distributor of the product — the supply agent of the consumer and the producer—however, plays not a less important part in competitive warrare. The question of a good commercial education are growing from year to year. The question of distribution is not less important than that of production. * Sential MOP, Industrial Education in France, p. 77.

"What is needed is not only the faculty of production, but also of distri-

button. A market is a necessary adjunct to a factory . . .

"The questions of technical and of commercial education are so closely associated that it is difficult to consider them except in connection with each other. Speaking generally, technical education may be said to have reference to the work of production and commercial education to that of distribution "-Six Philip Mauxis, Industrial Education, p. 47

3" Whether wisely or not, the policy of isolation seems to have been generally decarded. The teachings of the fathers, from Washington down, no longer governmental acquisition, so long resisted, seems inevitable. Our manifest destiny seems to point to the extension of free institutions, and with them commercial relations, to islands of the Pacific as well as of the Atlantic. The history, the resources, the lab guages of new regions are to become part of our national interests. Our international

exist between the dominant institutions of society and the educational provisions which the same society makes for its well being. "We have no more a constant and unchanging pedagogy than we have an unchanging form of society." "The demands of one hundred fifty, fifty, or even twenty-five years ago differ from those of today, hence education has become more and more a progressive factor, progressive not only in its conception, aims, and ideals, but in its means, methods, and appliances." Whether we approve or not, this is essentially an industrial and commercial age, and whether we will or no, a new element is being introduced into modern education. "The outlook of our time ranges across the seas. The active mind of the nations is centered, not on literature and art, but on gaining command over the forces of nature and on possessing the earth. And this new point of view is not without its effect even on the thoughts and interests of the generation still at school. Can we deplore it? Would it help matters if we did? The wind bloweth where it listeth. The school cannot create the tendencies of the age, and therefore will do wisely to adapt itself to them "1 A statement of what this new element in our

relations must be reconstructed; our political economy rewritten; our commercial connections extended; our transportation facilities increased; our financial machinery enlarged and strengthened. Have our educational institutions no concern in these new conditions? Are they prepared to do their part in training men for the new responsibilities and opportunities which are before us? "—JOHN H. CONVERSE, "Twen theth Century University," address at the University of Vermont, June, 1899, pp. 21, 22.

"Today the United States looms up as the greatest producer of breadstuffs, and with all the factors of gigantic development in metal production. It has already attained such a position in all branches of industrial power as to enable it to take up the gauntlet of competition in the international arena." Report of Frankfort Chamber of Commerce, 1898: United States Consular Report, October, 1899, p. 208

- 'SEIDEL, Industrial Instruction a Social Necessity, p. 9.
- * DUTTON, Social Phases of Education, p. 6.
- SADLER, Prusnan Secondary Education for Boys, p. 34.
- "Our school systems correspond, in a general way, to our civilization, considered as a whole, because they are the expressions of the same genius and life."—PRO **ESSOR B. A. HINSDALE, New England Journal of Education, April 15, 1899.

"There cannot fall to be a relationship between the successive systems of education, and the successive social states with which they have coexisted. Having a common origin in the national mind, the institutions of each epoch, whatever be their special functions, must have a family likeness."—HERBERT SPENCER, Education, authorized American edition, 1803, pp. 97, 98.

"The education required by a people is not a fixed quantity. That which is adequate for one generation or for one locality is not, necessarily, adequate for another

education is, an enumeration of the aspects it assumes, and a definition of its educational significance is the scope of the present discussion

BUSINESS EDUCATION DEFINED

"Classical," "hterary," and "industrial" are not necessarily exclusive as applied to schemes of education. "Manual training," says one of the exponents of this phase of education, has led to misconception, and he seriously considered the changing of the name of schools of the type - schools, it is claimed, that are not less literary, or less scientific, than are the customary high schools." In all forms of sound instruction there is much of common ground, and special names come from special elements introduced, that give the character to the whole in one course or combination of subjects the tone is from the classics, in another from science, and there may be another grouping which shall be distinguished by the study of modern languages and science as the hand-maids of trade. If classical education were limited to the classics. it would become an arrowly technical, as would the scientific education limited to systematic science. There is no gainsaying that the phrase "general education" has too long and too largely been assumed by the classicists. The classics have not, and cannot maintain, a "protected industry" of culture. Educational theory and recent experience have established that sound training, a general education in the best sense, may be obtained by a variety of grouping of subjects. The growth of knowledge, says President Eliot, has made it necessary to define anew "liberal education." In this paper education for commerce is used in the meaning that European discussion and experience

people should always conform to their necessities; that, as the conditions of a people should always conform to their necessities; that, as the conditions of affecting the education of a people should undergo a corresponding change, it may be one of degree or of character, or it may be a change involving both." - STRIBUN Technical Education, p. 1.

- C. HANFORD HENDERSON, "The Spirit of Manual Training," Popular Science Monthly, August, 1898.
- 2" Classical education, os we know it at its best in England, is not undiluted Latte and Greek, but Latin and Greek language, history, and literature used as vehicles for general culture."—SAULER, Secondary Education and Practical Life, p. 18.
- ³ Harvard Teachers' Association, March, 1899. Papers in Educational Revue May, 1899. Also Report of Sub-committee on Commercial Education to Technical Educational Board of the London County Council (London, 1899), p. v.
 - "See "What is a Liberal Education?" Educational Reform, pp. 89-122.

have given to it, "a general education of such a nature as shall best fit youths for commercial pursuits," or it is that "which stands in the same relation to the life and calling of the manufacturer, the merchant, and other men of business as the medical schools of the universities to that of the doctor—a system, that is, which provides a scientific training in the structure and organization of modern industry and commerce, and the general causes and criteria of prosperity, as they are illustrated or explained in the policy and the experience of the British empire and foreign countries."

Education for commerce will disappoint if it be planned on narrow technical lines. Manual training would have failed had it been limited to shop-work. Sound education must produce men; in doing so it may give to them a preparation for industrial or commercial careers. Much of criticism has been directed against public manual-training schools on the ground that they are "high schools," that they fit for college, give training in languages, science, and the like. Pray, have these subjects no meaning to the artisan? Cannot industry be ennobled by more of culture to its rank and file, as well as its captains? Because a boy puts on overalls and goes for a part of each day for instruction in shop-work, he is not thereby incapacitated for a study of literature,

*C. W. BOURNE, Report of London Chamber of Commerce on Commercial Education (1898), p. 8.

"It is sometimes supposed that the question here raised is between a 'liberal' and 'technical' training, between the culture of the mind and the preparation for a career. But this view is a narrow and partial one. All school studies are, or should be, in a sense, a preparation for a career -- if we include under this title all that raises the industrial capacity of the scholar, or gives it a general bins in one direction or another. In this sense the question lies between predisposing boys towards quill driving or towards handicraft. But in another sense no school study, whether literary, scientific, or manual, should aim at a preparation for a career, masmuch as the educational idea ought never to be sacrificed to the mere acquisition of mechanical skill or 'useful knowledge.' The danger, however, of such a sacrifice is by no means confined to manual work, though doubtless manual training is specially hable at present to degenerate in this way, since, in spite of Froebel's work, the educational basis of such training is as yet very little understood in this country. It is characteristic of our traditions that we often confine the term 'liberal' education to the study of words and language, while all methods of training in other and more concrete modes of expression are apt to be called 'bread studies.' "- H. LLEWELLYN SMITH, in Studies in Secondary Education, pp. 188, 189.

Report of the London School of Economics and Political Science (1895-99), p. 7.

language, and science.' Under the head of "Manual Training and Book Work" Dr. Henry H. Belfield, of Chicago, collected information to determine whether the time given to manual training diminished the amount of academic work. Data were gathered from forty-two institutions, and led to the following conclusion: "The general testimony of the replies is that pupils taking manual training is part of their school work, in the regular school hours, accomplish at much academic work as, or more than, those pupils who devote the same number of hours to school work without the manual training" By the indicated division of his time the pupil sees that more general subjects have a practical application, and in addition that mechanical pursuits are dignified. The mechanic becomes at once a better man and a better mechanic. Commercial education is less technical than is manual training, and the favorable relations here pointed out between manual training and general culture, to a greater degree will hold for commercial education. It is no idle dream to say that the hope of the future lies in giving to that large, but increasingly larger, army engaged in industry and commerce a training that will make them more intelligent and efficient.

Those who are to formulate courses for commercial instruction should see to it that they are sound educationally. Schools of commerce of the new type are not to be competitors with or duplicates of that clearly defined institution, the "American business college" Let a strong emphasis be placed on the last part of the phrase "commercial education." If schools of commerce, as a branch of public education, are to win and hold the favor of educational experts on the one hand, and of the business community on the other, they must be

"You can't confine a school which is to train character and expand the intelligence of young children or youth, either to purely commercial subjects or to purely agricultural. That would be like following the example of the Shetland minister who preached for a year and a half on the twelve wells of water and the three score and ten pain trees which were in Elim, devoting one bunday to each well and each palm tree "-SADLER, Secondary Education and Practical Life, p. 15.

. Industrial Education in the United States, pp. 601 620.

EDWARD W SCRIPTURE, director of the physiological laboratory at Vale University, has a paper in Manual Training Magazine, Vol. 1, No. 1, October, 1899 (University of Chicago Press), under the head of "Manual Training and Mental Development," in which the claims are almost extravagant for manual training at an instrument of education. The contention is that it not only equals, but is superior to other forms of training.

more than "clerk factories." Business schools cannot claim respectability if they furnish a training cheap, or inferior. No commercial course or school should offer a short-cut or "snap" to the completion of the grade of study in which it is placed. Those cities that have set up two-years' courses of study and called them commercial high schools have not duplicated the institutions that have been so important a factor in the recent industrial and commercial success of Ger many, and that have made German education justly famous. Instead they have attempted to rehabilitate the business college by ingrafting it on the high school. Schools of this class were justly criticised by President Eliot in his discussion on "Commercial Education" before the International Commercial Congress in Philadelphia. It is little short of an opera bouffe on education to find in courses of study algebra and phonography set down as exclusive electives, and what wonder that in schools where courses are so made "commercial" is a term of reproach! Let us not discredit the German by substituting educationally for "made in Germany" that other phrase which, by a similar substitution, has been so discredited industrially, viz., "cheap and nasty."1

THREE SORTS OF BUSINESS SCHOOLS NEEDED

Whether we regard existing conditions that create a demand for business instruction, or some future state to which we might hope to attain by having supply lead demand, we shall find that there are three sorts of institutions needed to cover this field, and to articulate with our present educational organization. When we regard the needs of those for whom we are to plan—and what more rational principle as a guide?—we find that they are of three classes: (1) those who are compelled to take positions at fourteen years or younger, who at the best complete the course of the elementary school through the grammar school; (2) those who can give three or four additional years to training, who are able fairly to complete the course of the secondary school (3) those who can give yet other years to higher training.

To each of the above classes the community owes a debt, and for each it should make provision. There should, then, be three sorts of

^{&#}x27;WILLIAMS, Made in Germany (third edition, London, 1896), pp. 134 ff

^{*} Three sorts of commercial schools were given in the French semi-public recognition of 1885, and made the basis of suggestions by the French delegates to the International Congress on Technical Education in 1807 (Proceedings, p. 200).

business institutions: (1) some form of day or evening continuation school; (2) schools of commerce of the secondary grade; and (3) tertiary institutions, devoted to more highly specialized instruction along this line.

PRINCIPLES TO GUIDE IN ESTABLISHMENT OF COMMERCIAL EDUCATION

In marking out the above scheme certain principles should be kept in mind. (1) Successful specialization is not possible in the elementary school, (2) society has not discharged its educational obligation to those who are compelled to withdraw from the elementary school if it abandons them as educational outcasts; (3) secondary education needs modification, but special should not overshadow general instruction in secondary schools; (4) a wider study of some branch of business, or more narrow special training, should be given in institutions of the tertiary grade; and (5) the aim should be to carry a larger number of pupils from the elementary to the secondary, and from the secondary to the tertiary, institutions.

THE ELFMENTARY SCHOOL AND THE CONTINUATION SCHOOL.

Specialization in business subjects to be of value should have at least the foundation of sound elementary training, but it remains true that the training of the elementary school, as all other education, may be too bookish, oriented to a past era rather than to the present. The study of the humanities too often has meant one's "self-estrangement," the getting out of harmony with his social environment, neglecting the "race's fund of experience" and its "common life." Teaching of any grade and of any subject can be made more attractive and effective by giving to it a practical turn. Professor George Allen, known to an

It should be noted, too, that these are the divisions marked out by fifty years of Furgrean experience, and generally recognized, as for example, the London Board of Irade Conference, the Report on Commercial Education to the Technical Education Roard of the London County Council, Michael E. Sadler's paper on "Higher Commercial Education," etc., Professor H. Raydy's Denkschrift der Handelike Antheir in Leipzig, and Bericht über die offentliche Hundelslehrunstalt zu Leipzig für des 67 Schuljahr (1897-8).

"In my judgment we have no right to take a man's child from him, and keep him until he is fifteen, or to induce a man to trust his child with us until he is fifteen, and then hand him back, unable and unfit to earn his bread." (Wenderl Philips.) About this unqualified statement there is some question, but the ground for question is slight, if to fifteen we add three more years.

^{*}Rosenkranz, Philosophy of Education, pp. 276 ff.

earher generation as a masterful teacher of Greek, is to have a memorial professorship established to him in the University of Pennsylvania. When, at a recent meeting, his former students testified to his worth as a teacher, there was a general consensus for his breadth of view, and his power to interpret Greek life and thought in the life and thought of his day. In teaching in the elementary school, as in all other departments of education, two principles should be kept in mind—instruction which is sound in itself, and an adaptation of this to practical life."

The continuation school for those who are otherwise unable to go beyond the elementary school should become an important agency of adult education. The German continuation schools (Fortbildungsschulen) offer an interesting illustration of a form of education beyond the elementary school, closely related with it, yet designed for those who find it necessary to seek employment at about fourteen. Attendance upon these schools is compulsory to those who have not passed certain examinations, or attended some form of higher school. Two years of this attendance is asked and at four hours per week. In the enforcement of the compulsory feature, which does not give universal, if even general satisfaction, the authorities deal directly with the employers. This is the old question of society's self-protection; those who go from school before they are fourteen will be educated, if not in the school to discharge their civic and economic duties, then on the street, in the saloon, or socialist club to be society's enemies. If men are to be safe members of modern society, they must be taught to perform those duties which society imposes. "When a man teaches his son no trade, it were as though he taught him highway robbery." A successful appeal can be made to these classes, if schools are offered which give them an opportunity of bettering their station in life, that is, of becoming economically more efficient. That there is a present unsatisfied demand for adult education is shown, among other things, by the success of public lecture schemes in New York and Boston, the continued popularity of university extension and the Chautauqua sys tem, and the evening courses of business colleges and Young Men's Christian Associations.' Preferable to any of the foregoing, more

I London County Council's Technical Education Board Report, pp. 6, 11, 37.

The need for agencies of adult education is ably set forth by PROFESSOR SIMON N PATTEN in a paper, The Place of University Extension (Philadelphia, 1894) See also another very suggestive article in the same line by DR. HENRY M. LEIFZIGER, "Free Lecture System of New York City," Municipal Affairs (London and New York), September, 1809, pp. 461-72.

definite as a means of education, and furnishing a better equipment for the demands of modern life, would be logical, rational courses in institutions articulated with, and a continuation of, the elementary schools. The persons who are most in need of instruction beyond the elementary school have not responded in any measure to either university extension or the Chautauqua system. Says Consul Monaghan, of Chemnitz. "The supplementary schools are for the people who have to work what Chautauquas, summer schools, and university extension are for others."1 Foreign experience under this head is of interest. The Leipzig öffentliche Handelslehranstalt has for years had as one of its aims to give to those already in business the general and special training necessary for their callings. To this end instruction is provided in two courses, one more technical for one year, planned for those who already have the general training represented by our secondary schools, and the other for three years, more general, and more nearly corresponding to our high schools.2 The German scheme regards the continuation school as a place for serious work, there being instruction two hours per day for six days a week Instruction is arranged in the morning from 7 to 9 o'clock; also in the afternoon from 2 to 4. With us the afternoon hours of the Leipzig school would prove unsuitable, but if the hours were fixed from 7 to o A. M. and from 4 to 6 P. M., many employers would, we may feel sure, grant their younger helpers a slight shortening of the hours of labor that these laborers, might become more efficient. It is worthy of note that chambers of commerce and other trades and industrial organizations have been most active in promoting technical and commercial education in France, Belgium, Great Britain, and Germany.3

SECONDARY SCHOOLS OF COMMERCE.

It is with institutions of the secondary grade that we are chiefly 'Cited in Report of United States Commissioner of Education, 1807-98, p. 1053, Advance Sheets.

The one year course for apprentices (Lehrlingsfuchkurs) has English and French correspondence, commercial arithmetic, bookkeeping, lessons and laws of exchange, lessons on commerce, and stenography. The three year course (den jahrige Lehrlingsabteilung) has German, English, and French languages, commercial arithmetic, science of commerce, bookkeeping and accounts, correspondence, commercial geography, penuianship, and stenography (Satsungen fur die offentlicht Handeltlehranstalt zu Leipzig, pp. 15, 11.)

³ PROFESSOR JAMES, Education of Business Men in Europe: SADLER, Higher Commercial Education, etc.

concerned, and it is in institutions of this grade that there is most question as to the degree and character of special commercial instruction Present educational discussion is centering about the high school, how to modify its course of study, increase its attendance, articulate it with the elementary school on the one hand and with the college on the other, - these are some of the aspects the question assumes. One who has followed recent discussion feels that there is much to warrant the opinion expressed by Superintendent Balliet before the last Harvard Teachers' Association, that the changes of the next twenty years will not be in the university, or in the elementary school, but in the high school.' In England and America alike, education has been too severely and too narrowly classical. The classics have dominated first the colleges, and through them the secondary schools. The director of special inquiries and reports of the Department of Education in Great Britain has said that with them commercial education is often an angry cry of protest against misplaced and mechanical classical instruction." Manual training in this country came in the form of similar protest against too narrow classicism. Its following was due to dissatisfaction with the older method of education, as well as from a desire to make training more practical.3 A paper before the National Educational Association, at Los Angeles, on "The Advent of the Commercial High School," was directed chiefly against high-school courses that are designed solely to prepare for admission into classical courses of colleges.4 Of the narrow college education to which these courses have in the past led, the vounger Charles Francis Adams says, "In the days of repeating rifles, Harvard sent me and my classmates out into the strife equipped with shields and swords and javelins."5 President Eliot speaks hopefully of secondary schools when he says that they are more and more escaping from the sway of two ideas that have wrought great harm to American education, equality of powers and opportunities of those for whom they are planned, and uniformity of school product. He, however, rightly qualifies this statement with the observation that while these are abandoned theoretically, they too largely obtain in practice.

^{*} Reported in the New England Journal of Education.

Special Reports, Higher Commercial Education, Vol. 111, p. 2.

[&]quot;Industrial Education in United States." Bureau of Labor, Eighth Annual Report, Washington, 1893, p. 23.

Given by W. C. STEVENSON, Kansas State Normal School

Cited in WOODWARD, Manual Training.

^{*} Educational Review, December, 1897.

Yet in a later paper President Eliot, in discussing "Recent Changes Secondary Education," confines himself almost solely to changes a the requirements for college admission."

Courses or schools of commerce should be added as an integrapart of our system of secondary education. In these there can ke given instruction along the lines of such general subjects as our on literature, modern languages, geography, history, mathematics, natura and physical science, political economy, and political science. In the selection of material for study from these general subjects those aspects may be chosen that have a relation to commerce and that relation should be pointed out. In addition, instruction should be furnished in penmanship, business forms and practice, accounts, business law stenography and type-writing. In such a course the general should remain of more value than the special features. Nothing should be considered that will in any sense go counter to the spirit of our greaeducational classic, that secondary schools are to preserve a higher state of educational efficiency.* The diplomatic and consular service of Great Britain and the United States testify from Germany and other foreign countries, to the high state of business efficiency that the Ger man shows. In part this is due to the technical business schools of Germany, but in part is from the sound training in modern language

Superintendent Maxwell, in a recent discussion before the New York Chamber of Commerce, makes the following hopeful statement as to possibilities of the curriculum of a commercial high school: "Not only should commercial arithmetic and book-keeping, banking, and modern languages be taught, but such subjects as international commerce, the work of the produce and other exchanges, the regulation of systems of weights and measures throughout the civilized world, methods of determining quality in grain, yarn, silk, and other staple and commercial articles; the systems of money used in different countries, and systems of exchange, the transportation of goods, railroad fores and freight rates, ocean transportation of freight, price quotations, the explanation of the settlement of balances by export and import, a kn. *1 edge of merchandise based on the study of natural sciences and determined by instruments of precision, such as the microscope and polariscope; insurance in add to ramifications; political economy, commercial law, and all other matters which it concerns a merchant in these modern days to know." —Superintenders Maxwe-1 Commercial Education, p. 9.

"The study of modern Languages and of commercial geography, including the technology of merchandise and the elements of science underlying it, constitute the groundwork of a commercial education." MAGNUS, Industrial Education, p. 27

[&]quot;Recent Changes in Secondary Education," Atlantic Monthly, October, 1800

^{*} Report of the Committee of Ten.

and science, and the high disciplinary value of the German Realschulen, and Oberrealschulen. Training for business, as other forms of education, requires time, and to be of real value should be accompanied by breadth of view.' Such a course as is above outlined may be completed when the student is eighteen, if there has been a wise use of his time, and by pretty general agreement this is regarded as the most favorable age for him to enter on a business career. In a high school of commerce then, a student should gain power of expression through oral and written speech, a grounding in two modern languages, a knowledge of commodities, or the raw materials of commerce, notions of general geography and history, as well as some special knowledge of the industrial and commercial aspects of the same subjects. He may also be given some idea of political and economic science. In addition he may get a good deal of the principles and practices of technical business. The student, however, should be trained so that this economic value should not be fixed by what he is, but by what he may quickly and readily become; he should be of worth not for the information with which he is endowed, but for his skill in gaining and using new information. No school can turn out a finished business man; the secondary school can and ought to turn out those who shall become more efficient members of the business community. Students who pursue a course in commerce that they may make, at once and directly, of their education practical use, may be given in the final year of the course an opportunity to perfect themselves in some technical subject, as accounts, or stenography and type-writing.

HIGHER SCHOOLS OF COMMERCE

Specialization is fairly established for higher institutions, and in the occupations for which special instruction is offered, business should be included. Some may hold that only general courses should be provided for business men, that a business training cannot be given in higher or other schools, and that it would be better for the future business man to get his general training as a basis and then to serve an apprenticeship, travel and observe. Advanced training is necessary for the captains of trade and industry. Colleges of commerce should train "pioneers of trade," courses should be formulated in accordance with the facts, that "commercial and industrial life rest on a complex

^{&#}x27; See report of J. J. PINDLAY to Shesheld Chamber of Commerce, reprinted in Prolessor James' Report on Education of Business Men in Furope, pp. 213 ff

these laws," and that if commercial supremacy is to be permaced these laws must be taken into account.' Superior natural advantage native aptitude, or blind chance may give to a people temporary accurages. Indeed, Matthew Arnold said that an obstacle to English profiting by foreign experience in education was an exalted regardable of the own energy and prosperty.' England may be beyond this is but it is doubtful if the United States is. Let us not forget that in the end training will tell. The getting of markets, and the hoding markets, is not sentiment, it is not extravagant claims, it is a market of education, and if we are to insure our economic future we must go to our commercial leaders, wide and deep training in the special subjects with which they are to deal. Our experience in the past cannot hold for the future. May we not truthfully say that the nation has become great and powerful, not by reason of education, but in spite of a special cannot be seen to be a subject of the special cannot be a special cannot be seen and powerful, not by reason of education, but in spite of a special cannot be seen as a special cannot be special cannot be

SCHOOLS OF COMMERCE WILL INCREASE ATTENDANCE AT SECONDARI AND HIGHER INSTITUTIONS.

In educational administration we are confronted with conditions is well as with theories. At present a comparatively few of the students of secondary schools pursue courses in higher institutions. On the other hand, the percentage of those who go from the elementary to the secondary schools is discouragingly small. Several modifications of

London County Council's Technical Educational Board Report, p. 1111.

[·] Higher Schools and Universities of Germany, p. xx.

[&]quot;Just as in an individual it is mind and body that, operating together, we had a man's life as their common result, so it is not merely the country, but also the race, that produces history for good or for evil. In California the gold existed from the days of old, there was that splendid harbor of San Francisco, and the gigather Weilingtonia rose in the valleys before man set his foot under its majestic shale for centuries had the hapless Indian, the haughty Spaniard, possessed the country without finding a single nugget, without senoing a single keel out of the Golden Gates, and not ere the sharp eye, the active mind, the strong arm of the American secred upon this western paradise, did California rise to its immense historica, and commercial importance."—Dr. G. Kinkkit, quoted in Years, The Golden Gates of Trade, fronting title page.

DUTTON, Social Phases of Education, p. 148.

^{4&}quot; Only an insignificant percentage of the graduates of these schools go to collect or scientific schools "--Report of Committee of Fen. p. 51.

⁵ In Philadelphia 3½ per cent, of the school population is enrolled in the baber schools; in most cities the percentage is higher, generally ranging from 5 to 7 percent.

existing practices are the natural outcome of these conditions. Let us have less regard for that small minority that goes to the next higher institution and more for the large majority that does not. Not only have public high schools been largely resolved into fitting schools for colleges, but quite as true the grammar schools too often are devoting themselves assiduously to preparing for passing examinations for admission into the higher schools, and too frequently the grammar school is graded by its percentage of successful candidates. We shall agree with James P. Monroe in his discussion before the Harvard Teachers' Association, "The tendency of the secondary school is to leave the boy who does not fit for college, indefinitely and unhappily suspended between the earth of the elementary school which he has come to despise, and the heaven of the university, which he is taught to aspire unto in vain." Incidentally only the high school should be a fitting school, and it "wrongs the public when it gives its best effort to college preparation." Only incidentally should the elementary school prepare its pupils for admission into the higher schools. At each stage there should be an education that is complete in itself, and this should be closely articulated with the next higher stage.

I am not of those who feel that already the high school is too closely articulated with the college. On the contrary, the college needs to widen its entrance requirements, and give options on subjects that will enable the school to be at once a finishing school and a fitting school. The existing high school has been not inaptly defined as "a fetich," i. e., "something itrationally reverenced." There are many ways of regarding a system of education; President Low defines it as "like a pyramid, which all the way down should take its shape and its proportions from the corner-stone at the apex." President Low's corner-stone is the university, but he goes on to say that it is a "shameful thing" that the facilities for elementary education are not equal to the public needs, and that it is true for the great mass of the community that they leave school at fourteen years of age or younger.3 Articu lation of the sort suggested by President Low has been a most serious detriment. The corner-stone has been of too formal a cut, and it has too often pressed down rather than lifted up. The college has so largely

^{&#}x27;Reported in the New England Journal of Education.

^{*} Educational Review, May, 1898, p. 427.

Address at the Twenty-fifth Anniversary of the Albany High School. Extract printed in School Neview, June 1894.

influenced the secondary school that the passage from one to the other for those who go to college, is comparatively easy, far easier than it is corresponding passage to the secondary school from the elementary school. Let the secondary school widen its course, and come into more vital relation with the elementary school, and then let the collect touch the secondary school at more points by accepting a wider rungs of subjects as satisfying entrance requirements, and our education will become at once more organically related, and less formal and mechanical.

Again, under this head, widening courses of study will make ther attractive to wider ranges of interests, and an increased number will go on from one grade to another. As pointed out by Seidel, technical instruction is not a substitute for, nor opposed to general education, rather it is the most effective means of securing a general education for a large class.' There is much of truth in the statement, "We can conquer the uneducated and half educated people of this country for secondary and higher education only by offering them courses of stude which, while they are of a strictly educational character in the best sense of the word, shall also have some bearing on their future everyday life, shall have some direct relation to the work they are called upon to do in the world." If we examine the facts for the attendance upon the secondary schools we shall find that in most communities young people from fourteen to eighteen years of age can gain employment and contribute to the support of themselves and other Set over against this that to the homes from which these young people would come, their coming means sacrifice and deprivation, and it can be readily seen that the decision will depend upon the practical consideration of the probable outcome of pursuing the school's course To the community at large the high school is regarded as the sacred portal to the college, a luxury, well enough for those who can afford it, but as not for those who daily face the sterner realities of life. The high school needs to be more largely freed from the systems of

Industrial Education a Pedagogic and Social Necessity, p. 21.

not only because I think they are needed, but because their establishment will director and indirectly help the classical courses."—STRVFNSON, in Los Angeles paper 1. "Advent of Commercial High Schools."

PROFESSOR JAMES, Education of Business Men in Europe, pp. 27th, 27th A professor of Latin in a state institution of learning, said recently: "I family commercial high schools and commercial courses in higher institutions of framers.

mediaval education, and brought into relation with the life of the present, and if so its usefulness will be much greater to those who now avail themselves of it, and the number who do avail themselves of it will be largely increased.

SCHOOLS OF COMMERCE A PRESENT NECESSITY.

Courses in commerce in higher and secondary schools are the logical outcome of recent discussion, and they should mark the next step in educational progress. By 1890 the right and wisdom of many groups of subjects and a considerable degree of specialization in higher institutions passed without question.' From this on, discussion has centered about the high school. Commissioner Harris, in his letter of transmittal of the Comunities of Ten's report, said that it was generally agreed that secondary education is the most defective part of our education. He spoke with keen discernment when he predicted that this report would call attention to a discussion of educational values, and probably he did not claim too much when from these considerations he gave out the report as the most important educational document ever published in this country.' Since that report the high school has been, and for the immediate future it is to be, the key to the educational situation. Aiready the smoke of conflut has sufficiently raised to show certain things in fairly clear outlines. Variously expressed and stated, the function of the high school

"The old-fash, oned college, designed for a few favored classes, belongs to the past. The modern democratic and industrial world demands a university as broad as the life and interests of all the people."—C K, ADAMS, quoted in *Industrial Education in United States*, p. 103.

"The Vale of the future must count for even more than the Vale of the past in the work of city, state and nation. It must come into closer touch with our political life and be a larger part of that life. To this end it is not enough for her to train experts Side by side with this training, she must wake in the whole body of her students and alumni that wider sense of their obligation as members of a free commonwealth which the America of the twentieth century requires "- PRESIDENT HADLEY, Inaugural Address Vale University, 1899.

* The elaborate report of the British Royal Commission on Secondary Instruction has much that is in harmony with the Report of the Committee of Ten. The Royal Commission's definition of secondary education is not without interest in this connection, it is "the education of the boy or girl, not simply as a human being that needs to be instructed in the mere rudiments of knowledge, but it is a process of intellectual training and personal discipline, conducted with special regard to the profession or trade to be followed."

is the peoples' college, the public institution in which is given preparation for life—a finishing school.

The above statements may be thought to need qualification. There has not been, nor does there now exist in this country, anything like agreement as to educational values, or the scope and function of any institution. Three phases are observed through which opinion passes First, a unanimity of ignorance and indifference, which, if it is followed by a disagreement of inquiry, leads in the third case, to a unity of sound opinion. While disagreement characterizes present discussion, it in itself augers well for the future—Educational progress in Prussia has not been unattended by that intense bitterness born of strong devotion to conviction—Sadler quotes from a German observer that the educational parties "fight among themselves," "with the ardor of religious fanatics."

The principle of election granted, for what classes are provisions to be made, and what shall be the manner of election? Already courses are given looking to preparation for the professions and industrial life, but up to this time slight regard has been entertained for those who are to enter on business pursuits. Indeed, our higher training has been in the main a stimulation to the so-called liberal professions, and our educational machinery must bear the onus of their present over-crowded condition.3 On the other hand, trade, if well regulated, can scarcely be overstocked. Rather, "it flourishes by multitudes," and increased attention to it means progress, both material and intellectual.4 This offense of educators is not new; three centuries ago an English worthy arraigned the practices of teachers of his time in terms that still give us pause. Scarce a tradesman's son, said he, learned grammar well, but a country schoolmaster declared he would make a scholar, and forthwith all the lad's kin would cry out, "what a pity so hopeful a youth should be lost in trade!" in consequence of which, we are told.

^{*} Spencer, Education, p. 101.

^a For an account of the recent unrest in Prussian higher education, and the movement that led to the promulgation of the famous "Lehrplane und Lehraufgaben fur die hoheren Schulen," see SADLER, Problems in Prussian Secondary Education, sec. VI, pp. 23 ff.

See CHAS. H. THURBER in National Educational Association Proceedings 1897, pp. 809, 810. Our college courses have turned many boys from business where they would have succeeded to professions where they have failed,—Professor James, Education of Business Men, I. p. 12.

⁴FREELAND HUNT, Worth and Wealth, p. 57.

many good tradesmen were lost, and poor scholars made.' Instead of feeling that scholars shall be lost in trade we ought rather to feel that without them in it we shall lose both scholars and trade. Our instruction ought to show that commerce in itself offers opportunities for the most useful and attractive careers. A recent issue of the New York Nation has an article on college graduates and teachers, in which the "swelling host" of university-trained men who look to teaching as a career is regarded as an educational problem. The solution there offered is for university men to teach in secondary schools. But may there not be other careers for university men?

Education for commerce means wider provision for the needs of that important element of modern society, the business community. Adequate provision is not made if a few disconnected subjects be added to existing courses. The demand has not been satisfactorily met if commercial instruction be given by the untrained and disinterested instruct ors of existing faculties, or with the most inferior equipment of existing institutions. Theoretically, the establishment of business education is sound, practically it is just, and this whether regard be had for those who most largely pay for public education, or for those who are to receive its benefits. Seidel, not without reason, asks how so large an expenditure of money and energy for public education can be justified if the school makes no contribution towards the child's equipment for life. From every fair consideration the demand of the time is for schools more closely articulated in themselves, and better adjusted to existing conditions. We need schools which shall give sound training, but which

^{&#}x27;FRANCIS BREWSTER, Essays on Trade and Navigation (London, 1695), p. iv.

² September 14, 1899.

³Heretofore systems of education have helped, to an unfair degree, those who are to enter on literary pursuits.

[&]quot;Merchants have asked the question, why is so little done for the commercial class by the State, especially for the education of merchants, who contribute most of the taxes that the modern state requires?" Magdeburgische Leitung, citation in United States Consular Report, February, 1899, p. 172.

^{*} Industrial Education, etc., p. 23

⁵ We are here speaking of public education. It is only with the mutual sympathy and mutual understanding of teachers in schools of various grades that the desired articulation can be realized. "All grades of schools, elementary and second ary, are parts of national education; all are members of one body, and the health of each depends in a large measure on the health of the rest. The quickest, perhaps the

at the same time will furnish a more thorough preparation for practical life in the present era; in supplying this need business schools are a necessity.

only, road to true unity in the whole system lies in the friendly intercourse and recuptocal confidence between the different groups of teachers.— SADLER, *Problems a Prussian Secondary Education for Boys*, p. 164.

П.

BUSINESS EDUCATION: ITS VALUE AND NECESSITY.

"Our energies and our prosperity will be more fruitful and safer, the more we add intelligence to them. Here, if anywhere, is an occasion of applying the words of the wise man: "If the iron be blunt and the man do not what the edge, then must be put forth more strength; but wisdom is profitable to direct." "—MATTHEW ARNOLD, "Iligher Schools and Universities in Germany," edition of 1892, p. 2t.



BUSINESS EDUCATION: ITS VALUE AND NECESSITY

PLACE AND POSSIBILITY OF BUSINESS EDUCATION.

Liberal education has popularly meant one thing only in this country. On the other hand technical education in any fair sense has not been extended to preparation for commercial life. Probably two facts explain these conditions: First, our inherited notions of education have given an undue place to the humanitarian element; and, second, business instruction has been thought to be impossible. An undue regard to the humanitarian, however valuable it may be to those having certain antecedents, of certain conditions in life, and who wish to prepare for certain future careers, cannot but weaken our general education, no less than it would be weakened by an undue regard to the practical. Education for its own sake, is not wholly in the right, no more than is it wholly wrong. On the other hand practical considerations alone cannot be made the rule and guide in matters educational. We need at once an enlarged conception of the notion of liberal education, and a liberalizing of the elements that are practical.' The definition of education by John Milton ought to stand for our time, if not for all time: "I call therefore a complete and generous education that which fits a man to perform justly, skillfully, and magnanimously, all the offices, both private and public, of peace and war."

*JOHN H. CONVERSE, "I wentieth Century University," pp. 14-16. "... the education now required by the laborer must be much more than merely literary, much more than merely technical; it must be a due combination of both elements." STETSON, Technical Education, p. 252.

"Further, we ought to get rid of the superstition attached to the so-called 'liberal' professions. Why is not agriculture as fiberal a profession as that of an attorney? A liberal profession is just worth what its actual votary is worth. An indifferent physician, an average barrister, a third rate litterateur, are singularly less interesting beings, and of much less social value than—not only an intedigent manufacturer, but even a good farmer, a clever and honorable tradesman, or a skillful workman, whether mechanic, carpenter, or mason. This, again is a truism, yet few people recognize it." -Julies Lamalike, in Le Figuro, reprinted in Demoritis Anglo Saxon Superiority (New York, 1898) p. 322

That the scope of education needs to be widened and that its worth would be increased by the introduction of a new element, was discussed in the preceding section; that business instruction is at once valuable and necessary is the theme of the present discussion. That there is a true theory in business, and that education can contribute to the understanding of this would seem clear from the fact that there is a good and a bad, a true and a false way of doing everything. Business success has been popularly regarded as a hocus pocus, beyond explanation and challenging instruction. Successful business men are thought to be born, not made. I doubt not but that all of us have heard at some time an expression of the sentiment referred to by Mr. Sadler; "If you are educated you can't make as much money as you could if you wern't." In the conversion of baser metal into gold, which, unfor tunately, has been the measure set on business success, there has been conceived to be some alchemic process beyond the ken of those not born with the favor of the stars. This conception, false for all time, is in the present more obviously false. Money making is not the sole end for which business is, or should be pursued. With proper ideals of business success we shall find that it becomes, to an increasing degree, a matter of knowledge, and of power to use it.

Commerce is not a thing of chance; laws are as plainly written, and are as unalterable in their effects on commercial transactions as in the operations of nature. To understand these laws and their working a student must study just as much as if he wished to become a botanist or other man of science, and this study will fit him, in its highest development, for the duties of a leading man of business, whether manufacturer, merchant—large or small—ship owner, or agent; for a consul, a president of a chamber of commerce, or for a statesman.

When we hear, as we often do, successful manufacturers and merchants speak discouragingly of the importance of commercial education, and tell us how, sent into the factory or office at an early age, they there acquired the practical experience to which they ascribe their fortune, we cannot but feel that such men overlook the fact that the conditions under which trade is now carried on are wholly different from what they were fifty years ago; and it is owing to this difference that a different and special kind of training has become indispensable. No one can contemplate the changes which have taken place during the present half-century without realizing their leveling influence upon the development of commerce, and the growing importance, as a factor of mercantile success, of that wider knowledge which enables

^{&#}x27;YEATS, The Golden Gates of Trade, p. 171

those engaged in commerce to understand, and to take advantage of, all favorable conditions in the conduct of business operations. The merchant's vision must extend beyond the limits of his own town or country. His observation must be widened, so that literally he may be able 'to survey mankind from China to Peru.' The range of his markets is continually extending, and his knowledge should be coextensive with the area of his transactions.

The success which, owing to our natural resources, attended our early efforts to apply steam-power to productive industry, induced a feeling of over-confidence among our people, and led us to disregard the connection which ought to subsist between school training and the business of life; whilst the absence of similar prosperity in other countries resulted in an earlier recognition of this important relationship. For this reason technical and commercial schools were established abroad many years before the necessity for their creation was realized in this country; but the leveling influences of scientific progress, to which I have referred, have placed us at a comparative disadvantage with other countries, or rather have lessened the advantages we formerly possessed on account of our natural resources, and have made it imperatively necessary that we should seek compensation in the endeavor to reap all the benefit we can from the improved and adequate education of our industrial classes.²

To deny that young men may be systematically trained for industry and commerce is to assert that industry and commerce are merely imitative arts, to be acquired only by seeing other people do the tricks and then practicing them. The gipsy in Asia Minor makes from nails one at a time with a hammer on an anvil, just as his ancestors did before him for hundreds of years. I have seen him doing it; but I also observed that his small children were stark naked, and that his larger ones had only one garment. In short, he was not making much of a living. Moreover, not one thousandth part of the nails we use in this country could possibly be made in that way. In industry and commerce all things are becoming new, and new methods of preparing young men for these occupations must be invented with discriminating foresight, established with prudence, and maintained with liberality.

NEED OF A NEW ESTIMATE OF THE IMPORTANCE OF IRADE AND COMMERCE.

Economic organization is deserving a place with other institutions that contribute to social well-being. Whoever adds to the commercial intelligence that gives larger and more varied sources for social consumption, or that enables sources already known to be utilized, is a

^{*} MAGNUS, Industrial Education, pp. 50, 51.

^{*}President Eliot, International Commercial Congress, Philadelphia, 1899 Proceedings, also in Inducational Review, December, 1899.

benefactor. The first step in progress was when men learned the lesson of mutual dependence, their own insufficiency. The means by which this limitation was overcome was barter, trade." The part of the tradesman has ever been a worthy one -" The merchant, who opens out the world to enterprise and makes nature's earth-gifts known to mankind, claims of right to be one of the great active pioneers of civilization." Moreover, it is a mistake to feel that devotion to trade betokens a "mean and money-grubbing spirit." Trade is the avenue through which established civilizations reach out to less fortunate lands and peoples,3 and it is, in truth, a blessing to him who gives and him who takes. For four centuries the spirit of courageous hardihood born of trade, has been, barring religious zeal, with which it has gone hand in hand, the chiefest force of the world. Trade first plowed the furrow round the world, scaled lofty mountain barners, threaded trackless forests, and braved the dangers of settlement in remote and unknown lands. The motive of the daring mariner of all ages, who put to test the theory that the East might be reached by sailing to the West, is unaccounted for on the sole basis of religious fervor. He regarded the physical needs of men in this world; with him, and rightly, bodies as well as souls were to be ministered unto. We have a common heritage with a people that, by trade, have been stimulated to grapple with seemingly insuperable obstacles.

I advise those who would learn with what a steadfast spirit the Elizabethan captains went out, how nobly they would die, to read in Hakinyt's Voyages the story of the last fight of Sir Richard Grenville in the Revenge the drowning of Sir Humi hrey Gilbert on board the Squirrel the escape of John Fox and his companions from the prisons and the galleys of Alexandria; the gallant fight of a certain English merchantman against the Spanish galieys off Gibraltar; the rash attack of Oxenham upon Panama; the exploits of Drake, Cavendish, and Raleigh; the voyages of Sebastian Cabot, Hawkins, Matthew Hore, John Rut, Chaloner, Roger Bodenham, John Iok, Thomas Stukeley, James Lancaster, William Towison, and dozens of others.

Trade needs no apology; it should not cringingly ask favors, it can come for its due with the confident assurance that, next to the spirit of Christ, no force has wrought so much for world progress. Trade can point with pride to its devotees certain that these have been

^{&#}x27;SIR WALTER BESANT, The Rise of the Empire, pp. 4 14.

² YEATS, The Golden Gates of Trade, pp 16, 17.

Livingstone looked to trade as a means of civilizing Africa. Ibid., p. 185.

WALTER BESANT. The Ruse of the Empire, p. 38

instruments of progress, that they have contributed to the welfare of their generation, and the future.' But it is in modern times that the merchant is of most importance.' The international division of labor, the relation and inter-relation of remote sections, complexity of production, and diversity of consumption, unite to give to the merchant a more significant place, and to demand for him general and technical knowledge on a wider range of interests.

SCIENCE OF SOCIETY AND NEED OF ECONOMIC LEADERSHIP.

Economic life conceived as an institution contributes to society's progress, and as such it should be recognized in systems of education Trade as a part of this institution has been, and is to be, an important factor for better life; in order that it may serve its true end, those who occupy the place of merchants and tradesmen need more complete equipment for their callings. They need to recognize what is termed "The science of society," one of the most elusive of conceptions, but one worthy of inquiry from him who would fill the place of merchant in our modern industrial organization." In the work on Industrial Education,

"Trade discovered America in the vessels of adventures, seeking new channels to the old marts of India; trade planted the American colonies, and made them flourish, even in New England, say what we please about Plymouth Rock; our colonial growth was the growth of trade—revolution and independence were the results of measures of trade and commercial legislation, although they undoubtedly involved the first principles of free government; the history of the country, its politics and policy, has ever since turned chiefly upon questions of trade and of finance, sailor's rights, protection, banks, and cotton."—FREELAND HUNT, Worth and Wealth, p. 504.

o"The calling of the Merchant acquires a new importance in modern times. Once, Nations were cooped up, each in its own climate and language. Then, War was the only mediator between them. They met but in the battle field, or in solemn embassies to treat for peace. Now, TRADE is the Mediator. They meet on the Exchange. To the Merchant, no man who can trade is a foreigner. His wares prove him a citizen. Gold and silver are cosmopolitan."

"Behold then the true form and worth of fortaign Trade, which is, The great Kevenue of the King, The honour of the Kingdom, The Noble profession of the Merchant, The School of our Arts, The supply of our wants, The employment of our poor, The improvement of our Lands, The Nurcery of our Mariners, The walls of the Kingdoms, The means of our Treasure, The Sinnews of our wars, The terror of our Enemies." Thus, Mun, England's Treasure by Forraign Trade (first published in 1664, but written ante 1630; Economic Classics edition), p. 119.

3" Yet one more science have we to note as bearing directly on, industrial success, the Science of Society. Without knowing it, men who daily look at the state of the money-market, glance over prices current, discuss the probable crops of corn, cotton, sugar, wool, silk, weigh the chances of war, and from all those data decide on

Robert Seidel goes further and argues to the conclusion, a knowled of social conditions should be the basis of every scheme of educated

Commercial instruction is necessary, first of all, to give to trade proper place in modern society, it can contribute to a better region society's intricate industrial organization, but in addition substruction will at once equip for economic leadership, and for efficience in subordinate positions.* Business-men of all grades need imagnify their callings. There is an opportunity for men to perform business splendid social service, to be real benefactors. Men affairs should be led to look to affairs directly as means of progremstead of relying entirely on indirect agencies that are offsprings business success—thousands of operatives more intelligently train for their special callings, with higher standards of living, with a mintellectual and economic outlook, surely this is a substantial gain a to be surpassed by founding schools to educate men out of the economic station, or endowing institutions to care for the economical unfit.

Herbert Spencer, in his lucid analysis of the question, "What knowledge is of most worth?" begins with that which insures the individual their mercantile operations, are students of social science empirical and blunders students it may be; but still, students who gain the prizes or are plucked of the profits, according as they do or do not reach the right conclusion. Not only the manufacturer and merchant must guide their transactions by calculations of suppart demand, based on numerous facts, and tacitly recognizing sundry general principle of social action, but even the retailer must do the like; his prosperity very great depending upon the correctness of his judgments respecting the future wholest prices and the future rates of consumption. Manifestiy, all who take part in dectangled commercial activities of a community, are vitally interested in understanding the laws according to which those activities vary."—Spencer, Edwardson, pp. 51,

Industrial Education a Pedagogic and Social Necessity, p. 42.

Superintendent Dutton, in a most charmingly suggestive book, expresses the belithat the pedagogy of the future will take its direction from sociology rather than from psychology (Social Phases of Education, p. 126).

"True, the masses cannot be philosophers, or all heads of departments, how vastly would the work of production and trade enlarge were the rank and the so efficiently trained us to be faultless in the discharge of duty though not compete for the rank of commanders "-YEATS, Golden Gates of Trade, p. axii.

3" There is an opportunity in business not merely to carn a living, not merely provide for one's family, not merely to heap up wealth which may be used to found hospital or coilege, but to confer bless ags of incalculable benefit upon manked improving the processes of business itself "—PROFESSOR JAMES, Pieu for Allessatum of Commercial High Schools, p. 16.

immediate self-preservation. In regular order there follow knowledge that leads to the individual's future preservation (through economic provision for future subsistence), to the discharge of parental duties and to proper social and political conduct. This knowledge is basal for upon it depends the welfare and perpetuity of the individual, the family, the social and political order. After this fundamental knowledge, comes that which seeks pleasure through the employment of leisure. It is patent that in the provision for social, family, and individual welfare, business education occupies an important place.

ADVANTAGES TO BUSINESS FROM BETTER TRAINED MEN.

Thus far the subject has been mainly regarded from the view-point of social order, let the treatment be narrowed to the range of business as a whole, and then to that of the individual business-man.

In age of mercantile activity, Sir Francis Brewster said he knew no subject "more writ about" and "worse handled" than trade. It was to him "a distemper in trade" that so few of wide training were found in mercantile pursuits. Yet Brewster lived in the golden age of merchants, when on trade was laid the foundation for England's future economic and political supremacy. Commercial pursuits need the esprit de corps that will come from business training along liberal lines. Such institutions as the Leipzig Handelshochschule, the London School of Economics and Political Science, and the colleges of commerce now inaugurated or proposed for several American universities, can but give to business a new tone in itself, as well as a new place in the range of occupations. Already we are told by a most penetrating critic, commerce is looked upon differently; classes which two centuries ago regarded it with scorn are now keenly interested.

Liberally trained men are those who regard business with new interest and give to it new meaning. Recent statistics of seven thousand Yale graduates taken for the past hundred years, indicate a significant movement in the occupations of college graduates, and a movement likely true for the country at large. A century ago, law,

^{*} Education, chap. 1.

^{*} Essays on Trade and Navigation (London, 1695), pp. 1, 111.

Universities of Pennsylvania, Chicago, California, Colombia, and Vermont, Business education became a department of the National Educational Association in 1892. This section met with the National Educational Association first in 1894.

^{*}RIGHT HON. JAMES BRYCE, "Commercial Education," North American Review, June, 1899.

medicine, divinity, and teaching absorbed 92 per cent. of the gradu ates of Yale; today the same professions claim 62 per cent. Business pursuits a century earlier received 6 per cent.; now they get 31 per cent. In the century the percentage of those who enter the ministry has fallen from 39 to 6 or 7. The first fifteen classes of Yale gave 78 per cent. of their members to the ministry. For one hundred years 40 per cent. of Yale's graduates became clergymen. Among Yale alumni business passed from being fourth in the list of occupations to third in 1842, and to second during the Civil War, and the Yale statistician expresses the belief that business "presumably will wrest the first place from the legal profession." A warrantable comment on the figures of the Yale Review is that business is demanding better-trained men, and that already colleges are beginning to meet the demands. "The typical college graduate now becomes a man of affairs as well as a scholar in the old sense."

Not only are more trained men, and better-trained men, going into business, but there is a growing importance of business-men in affairs

OCCUPATIONS OF YALE GRADUATES FOR A CENTURY.

	Learned professions, including law, ministry, medicine, teaching, and science	Business pursuits
1797	92 per cent.	6 per cent.
1802	73	17
1813-14		12
1817, 1819	Bo	15
1821, 1822, 1824	90	8
1826, 1830	73	9
1831, 1833, 1834	91	4
1839-40 -	77	11
1841-45	77	12
1846-50	72	15
1851-55	72	16
1856-60	70	17
1861-65	64	20
1866-70	69	20
1871-75	67	24
1876-80	62	28
1881-85	62	29
1886-90	64	28
1891-93	62	31
	Yale Review, N	ovember, 1898, p. 342

¹ Yale Review, November, 1898, pp. 342, 345.

and in public life. The diplomatic questions are to an amazing degree matters of business. It is the fear of the clash of commercial interests, the insecurity that would follow, that is today an important factor in preventing war.' This is in accord with the prophecy of Immanuel Kant uttered more than a century ago, in the essay on Eternal Peace, in which he argued for the suppression of war through the mutual benefits of commerce.' No other epoch has had so many business-men in public life. The supremacy of the lawyer as a leader is threatened; his hope is to add to his legal training, for which he will have slight use in public life, familiarity with industrial and business pursuits. Men of affairs in the present era are Flower, Aldrich, Depew, Wanamaker, Gage, Platt, Hanna—business-men all; and upon these and their like rest the destinies of the hour.

Consul-General Mason," in a recent report on "The Education of German Consuls," shows the new duties which the present era demands of consuls. Under the old system the chief work of the consul was to protect subjects living abroad. Then the consuls were to be educated as lawyers and diplomats; they needed to know international law, diplomacy, the history of treaties, etc. Now there is set the standard of knowledge of industrial processes, commercial values, and mercantile usages. In ten years there has been developed a new situation in Germany, and if we have not realized such a period of change, we are fast approaching it. Our future safety can come only from giving to business-men training for their occupation, an equipment for life. True, many of those who have recently achieved distinction were not trained for their future occupations, and developed their aptitude after entering on their careers, but such training is always uncertain and can but be costly. For every field of activity except business it is abandoned, and the reasonable demands of business is for a specially trained man. Higher education, limited in scope, has not appealed

BRYCE, North American Review, June, 1899.

Mr Goschen makes this statement of the relation of the factors in prosperity: "Wages depend on commerce, commerce on credit, credit on confidence, confidence on security, and security on power."

¹YEATS, Golden Gates of Trade. Edward Atkinson, Philadelphia Commercial Congress, 1899.

^{*} United States Consular Report, September, 1899, p. 119.

[&]quot;Higher education has become, to an increasing number of people, a necessity of life, not a luxury of culture." - SADLER, Problems of Prussian Secondary Education, etc., D. 110.

etc., p. 119.
"Not is this a merely academic question. Comparatively recent changes in the conditions of life have tended to make the more precise and highly differentiated

to its constituency. It owes the debt of business training, and business needs the influence of culture.

The occupations appealing to college men are indicated by an investigation conducted by H. E. Kratz, superintendent of schools, Sioux City, Iowa. Five hundred and thirty three men, successful in their callings, were taken in fifteen Dakota towns. Ninety per cent, of the ministers were college men, as were 85 per cent, of the teachers, 68 per cent, of the lawyers, 60 per cent, of the physicians, 40 per cent of the bankers, 30 per cent, of the editors, and 26 per cent, of the merchants and manufacturers. This showing for business is not altogether bad, but the percentage of college men in business ought to be increased.

Commercial education is necessary to relieve business of the monotony of its routine, to raise the business-man above the machine If one is to rise above the mechanical performance of his duties in business, it must be by a broader study and a more complete understanding of the processes of business. German training gives to the man who goes into trade a markedly different attitude than is given to him by Anglo-Saxon education. With us the business-man finds his livelihood in business, his life is elsewhere; the German finds in business a means of life as well as of livelihood; he loves business and devotes himself unreservedly to it. Too frequently the American boy who goes into a business house, spends his hours there as a price he must pay for other hours he wishes to spend outside. He labors for eleven months in order that he may have one month of holiday. Business needs men so equipped that they can surmount its mere details and get the broader view that is involved in its modern complex character.' Clerkships have been too long and too frequently regarded

results of systematic school and academic training apparently more valuable, and certainly more indispensable, elements in national welfare. The vigorous but usually imperfect results of self-education are finding themselves overmatched by the competition of highly specialized aptitudes skillfully combined with one another, subordinated into a single whole and applied with the utmost economy in the expenditure of effort and material. It is really, in another form, the struggle between robust individualism and the collective effort of a disciplined multitude."— lbid., pp. 8, 9.

^{&#}x27;See Proceedings of London Board of Trade Conference on Commercial Education, pp. 25, 49.

BESANT, The Rise of the Empire, p. 78.

[&]quot;I would wish to forewarn you against a fault unfortunately too common among young men commencing their careers. Many have what I will call the character of employé. They arrive in the morning at their work, do strictly what they are ordered.

solely as a means of existence. Places are often, as they long were with the East India Company, coveted by those who wish to be assured of a living and to have free time for other employment. John Stuart Mill, a detail clerk, regarded a clerkship as an occupation best suited to one who would undertake extended and laborious literary production, for it required a small expenditure of mental energy, and gave at once a means of subsistence and leisure.' Such a regard for business may, as in the case of John Stuart Mill, prove a gain to some branch of science, though it is at a loss of business efficiency, and in the vast majority of cases there are not the attending compensations. To have the largest measure of usefulness to business, one who goes into it should regard it as his life-work, a worthy end itself. "We sorely need," says Mr. Sadler, speaking for England, "in some districts that type of liberal education which is a natural avenue to a keen intellectual interest in modern commerce and industry. One of the most striking distinctions between Germans and Englishmen is that the former often take a much stronger intellectual, as distinguished from a commercial, interest in their business in life.""

EDUCATION WILL GIVE A NEW STANDARD OF BUSINESS ETHICS.

Business needs a more definite standard of professional ethics, which can be established only through a training that will lead men to look with contempt upon deviation from exact honesty. The trained man will be more efficient, he will be less subject to the temptation of trickery, and he will be above maligning his competitor. Professional competition is more intense in medicine and law than is business competition, yet aside from legal regulation, these professions have through training

and await impatiently for what they call the hour of liberty in the evening. No measuse of success attends these; they will remain employes all their lives. The employes who wishes to succeed is preoccupied unceasingly with the business intrusted to him, he regards it as his own, and finishes in the evening what he has been unable to doduring the day. Such a man is sure of success, if he adds to these qualities habits of order and economy."—Director of the Superior School of Commerce, Paris, to students (TREGAN, Technical, Industrial, and Commercial Education in France, pp. 137, 138).

"I do not know any one of the occupations by which a subsistence can now be gained, more suitable than such as this to anyone who, not being in independent cir cumstances, desires to devote a part of the twenty-four hours to intellectual pursaits.... For my own part, I have through life found official duties an actual rest from the other mental occupations which I have carried on simultaneously with them "-MILL, Autobiography (New York, 1887), pp. 86, 87.

SADLER, Secondary Education and Practical Life, p. 20

a criterion of professional etiquette that means much for dignity a advancement. Standards of honesty ought to be established as is do in the Superior School of Commerce at Paris, where honor and integritin commercial life are made the rule for commercial success.' Su instruction as this is possible, indeed it is unsafe for one to go in business without it. "The lad who enters West Point is no bratthan his fellows, but years of constant teaching that personal honor all important and that its highest expression is unfaltering courage a unswerving fidelity to duty, instills into his being a quality which make him a braver man in the face of danger, and one more certain to carout his orders without counting the cost to himself. So, I am satisfiemen educated in such colleges as are proposed would have great strength to resist temptations which so often lead to ruin and digrace."

But the gain to business as a whole, the establishment of proponotions of its importance as a social fact, and its relations to other fact can come through the improved efficiency of the individual busines man. Though forgotten and disregarded, the demand that the me chant needs training is no new demand. As early as 1628 Thomas Murhimself a noted merchant, enumerated the qualities necessary for the successful pursuits of his calling. These described under twelve head are highly interesting in the light of present discussion. The Macchant's Map of Commerce (1700) contained a discussion at length 6. "The Art of Merchandising and the General Parts thereof," in which the demands of knowledge and skill then thought desirable we enumerated. This and other discussions of the time show that the demand for general and technical business education is not new.

^{*} TREGAS, Technical, Industrial, and Commercial Education in France, p. 130

^{*}MORTON McMichael, American Bankers' Association, 1890: Report on Filed tion for Business Men, I, p. 38.

[&]quot;Common honesty is as needful in kingdoms and commonwealths that depend a trade, as discipline is in an army; and where there is want of common honesty in kingdom or commonwealth, from thence trade shall depart. As the honor, honesty riches, and strength of the nations are, so will be the rivade. These are the five aister that go hand-in hand, and must not be separated. "- INDREW VARRINGTON, public Richard Wormell before International Congress on Technical Education, 180 (Proceedings, p. 187).

^{*} England', Treasure by Forraign Trade (Economic Classics edition) chap pp. 2 ff.

^{*}ROBERTS, Merchant's Map of Commerce, chap. 11

If we may trust trade statistics the number of failures in mercantile pursuits is appailing. More than 90 per cent, of tradesmen are said to fail. Here, as elsewhere, failure is due to lacking some one quality. Emerson has somewhere said of success in general that, although a thousand men start with seemingly equal chances but one in the number has all the qualities to succeed. One after another fails as he confronts obstacles that he cannot overcome. There can be little doubt but that of the business-men who fail, many come near to success. This one thing ye lack is the edict, and they go down. The one quality, the lack of which accounts for many failures, is thoroughness, familiarity with details of business. In many such cases suitable business training would mean power to surmount the obstacle. A more intelligent devotion to business born of training, would convert many business failures into successes.

VALUE OF TRAINING NOW RECOGNIZED IN ALL. OTHER LINES OF ACTIVITY AND SHOULD BE IN BUSINESS.

The value of technical training now passes without question for all occupations and professions except business. "The old apprenticeship system having become obsolete and gone overboard forever, and scientific or technical knowledge being now required in all branches of manufactures and in many trades, institutions like these [i. e., technological] are become an absolute necessity if any country intends maintaining its position at the head of the industries of the world."

Such statements of ideals and requisites of success as follow can but be of value:

"An essential condition of success in business matters is, I do not dread saying it, ambition. The commercial man, the manufacturer who desires only an easy competence, is wanting in the energy, the sacred fire indispensable to success. In this age of steam and electricity there is no place for the indolent. Success awaits those only who, to the two essential qualities, order and thrift, join a real love of labour and the firm desire to succeed."—Director of Superior School at Paris (Targan, p. 137).

"Perseverance is indispensable to success. Place before yourselves a clear, well defined aim, and do not allow yourselves to be turned away from it. Be honest; be guided on all occasions by that interior light which is called conscience; consult it, and when you question it, if it hesitates, pause, for in respect to what is candid, loyal, and honorable, it will, believe me, never have the slightest hesitation. In thus regulating your lives you will find your reward in confidence, in consideration, in the credit which you will inspire. A merchant must be honest from interest, if he is not so from duty." President of Chamber of Commerce at a distribution of prizes at the Superior School of Commerce, Paris.—Ibid., pp. 136, 137.

*Petkin, Technical Education in a Saxon Town, p. 30. See also flowell, in Contemporary Review, 1576.

The apprentice system went out of existence when the demand strongest for skilled laborers, and this demand has been and is to supplied by education. Time was that one who would learn medicinassociated himself with a practicing physician and learned by observation and experience, but a practitioner so trained in these days would be discredited as a quack. Medicine as an art must be preceded to medicine as a science. Method of training for the law likewise by changed. The would-be lawyer does not depend upon the study are experience of a law office. The civil engineer does not learn to survey by carrying a surveyor's chain, nor the mechanical engineer to build bridges by serving as a common laborer. Excepting commercial pusuits, in all branches of society's work, special preliminary training now demanded, and given.

Business in these days is a highly specialized occupation, it touch a wide range of interests and requires a fund of special knowledg. The business-man should know languages of countries with which

Strison, Technical Education, p. 9.

tependent to a greater extent upon acquired knowledge and skill than upon una that we intelligence. One feature of these changed conditions is, that the knowledge and in some cases, the skill, which are now needed for industrial purposes, can longer be adequately obtained in the actual practice of a trade, but require, as in tenses of taw and medicine, a preliminary training or specialized school instruction. MAGNUS, Industrial Education, pp. 15, 16.

"In order to excel in a profession, in commerce, in industry, it is become necessary for a man to start by knowing a great deal more than used to be the in Not that mere knowledge avails without energy, initiative, imagination, judgment character. But these virtues need for their successful exercise a wider basis of know edge than before. The different parts of the world are coming to closer quarters will one another. There is increasing mobility, not of capital only, but of expert knowled coupled with industrial enterprise. Distant markets are less isolated. I comme production is becoming more universally a necessary factor in success. The amale however brilliant, is finding it harder to contend against the expert. The organic has to take into account an ever widening range of interconnected facts. The come of all this is that the need for a good foundation of sound and well chosen beedge is being felt by classes in society, for whom, not very long ago, much less still knowledge sufficed. They made up for lack of knowledge by their great energy all enterprise. But the game is getting harder for them, because there are more plant. and among the players are rivals who are intellectually better equipped. It is a mere information that is wanted, but trained power of getting information, of analyst it, testing its accuracy, dovetailing one piece of information into another, of apply it with economy and address. The searching discipline, which a good seconds. school can give, trains the faculties, and at the same time gives the sound and last #

deals, and be familiar with their business customs; ' he should understand sources of supply, the nature of commodities, and the science of transportation. There is nothing in the field of production, with all its agencies, in exchange with all its complexity, in consumption with all its diversity, that is without a bearing on business. Further, the business-man should be trained in accounts as a science. I am told by an expert accountant of this city, that many business-men are wholly unable to make up a statement of the condition of their business, and that it is no uncommon thing to find that they cannot intelligently interpret a business statement when it is made. Such men are adrift without a rudder, and are always in imminent danger of catastrophe. True, business cannot be reduced to so exact a system of knowledge as can medicine, law, or theology, but because a complete and systematic science of business cannot be established, can we safely leave the whole subject to haphazard knowledge gained through experience? Here, as elsewhere, training by experience is costly - too costly.

Business-men wisely trained should have another school back of the school of experience. "It used to be the fashion to study medicine by cleaning the doctor's horse and buggy, grinding his drugs, and driving round with him to make his calls; and to study law by copying deeds and briefs in a lawyer's office and reading books taken from the lawyer's library in the intervals of clerical labor; but the world has now learnt that there are better ways of studying medicine or law, namely, by going to a professional school, where progressive systematic instruction rapidly developed is to be had. The intending physician or lawyer who does not go to a medical school or a law school condemns himself nowadays to hopeless inferiority, even if he ultimately gets into his chosen profession." To make a comparison, as the science

basis of general knowledge." - SADLER'S Problems in Prussian Secondary Education

[&]quot;As has already happened in law, medicine, engineering—in nearly every field of applied science—the day of the all-round man, with a smattering of many things but a thorough knowledge of nothing, is definitely past, and the successes of the future will be won by the nations as well as by the individuals who can bring the highest attainments, the largest experience, and the most consummate proficiency to bear where competition is keenest and the richest prizes are to be won."—FRANK II. MASON. Consul General at Berlin, U. S. Consular Report, September, 1899, p. 121.

⁷ Many of our consuls to Latin America do not know the language of the districts to which they are sent. See SENATOR WHITE, "Our Inadequate Consular Service," Forum, July, 1898.

^{*} PRESIDENT ELIOT, Philadelphia International Commercial Congress, Proceedings.

of medicine has become complex, years of study have been increased in number, and lengthened in duration. When cupping and caustic were the sum of medical practice, preparation was an easy matter. Even now, with increased years, clinics, laboratories, and special cases, the new-fledged physician feels that he ought to associate himself with an experienced practitioner, rely upon a consultant, or gain experience in hospital service where he can defer to the judgment of a chief Again, in medicine this is an age of specialists. After a general course the physician takes some branch of the science and devotes himself to its study and practice, but the broad general knowledge is necessary if he is to be successful in his speciality. So in business, wide general knowledge is necessary. The business-man must know the anatomy as well as the physiology of industrial society; he must be quick to detect symptoms, pronounce diagnoses, prescribe remedies.' Only when we have business recognized in systems of instruction, and the business-man giving himself special preparation shall we have this occupation assuming its true place, a healthier state of mind among business-men themselves, and a more efficient business-man. The times require a different sort of business-man. New industrial agencies, diverse organization, demand better trained men, and these, instruction is to give.

"Instruction must always be educative, and just as one inculcates patriotism in a soldier, humanity in a physician, self-denial in the missionary, the cultivation of science in the scholar, devotron and culture in the teacher, love of beauty in the artist—in exactly the same way the aptitude for commercial affairs, a desire for work, the love of order and economy, the spirit of enterprise, clearness of judgment, and probity—all qualities which make a good business man—can be taught in the schools of commerce."

every human pursuit and profession is now mained in its efficiency by the relatively undeveloped condition of pure and applied science. I sometimes hear that we are to win the markets of the world by free trade and retain the home markets by protection. Well, the freedom in which I see the greatest potency is the free instruction of the industrial classes, of men and women of all pursuits and professions, in the highest and deepest truths which science can discover."—Address of President of Cornell University, November 15, 1892; quoted in Industrial Education in the United States, pp. 102, 103.

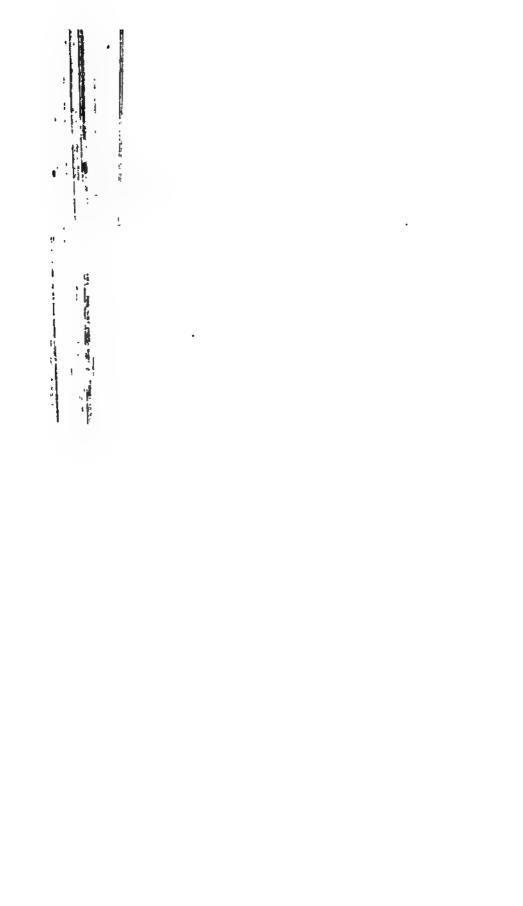
^{*} JAMES, Education of Business Men in Europe, p. 139.



III.

RECENT FOREIGN EXPERIENCE IN THE TRAINING OF BUSI-NESS MEN.

"Of all species of extravagant waste, there is none more unpardenable than that which permits one nation to remain in ignorance of the clever and successful methods devised in another for gaining important ends."—New York "Nation," August 31, 1899, p. 174.



RECENT FOREIGN EXPERIENCE IN THE TRAINING OF BUSINESS MEN.

A FURTHER TREATMENT NEEDED.

Rarely does a well-performed piece of work lose in value so quickly as has that of Professor James on Education of Business Men in Europe. The very rapidity with which this report has ceased to be authoritative is an indication of the need that there was of preparing it, and of the rapid development of commercial education since it appeared. The James report well served its time, but it can scarcely be said to be descriptive of present conditions in the countries treated. It is the aim of the present division to pass in brief review what has been done in commercial education in some of the representative European countries since 1892, and to give information of the present status of this phase of education in Europe. For convenience of discussion, the subject will be treated under three heads: (1) Great Britain; (2) Germany and Austria; (3) France and Belgium.

COMMERCIAL EDUCATION IN GREAT BRITAIN

English education, classic and insular. — While the statement above made as to changes that have out-dated Professor James' work is true in general, it is more obviously true of its treatment of Great Britain. Under the head of "Higher Commercial Instruction in England," he says: "This subject can unfortunately be disposed of in a very few pages. It is not far from the truth to say that there is no such instruction given in England at all—at least such thorough, systematic instruction as would justify our putting it in the same category as that of France, Austria, or Germany." The education of England in its spirit and emphasis is classical. In the main features of its education and in its language-study, England has largely ignored the rest of the world. English character and England's favorable geographical position have given to the nation a commanding place in the world's industry and

^{&#}x27;See SADLER, Higher Commercial Education at Antwerp, etc., p. 73.

P 194.

trade, but improved communication and made commerce less a matter of geographic On the other hand, German education is supp or, through education the German is develthat is rapidly making its way against the na man. Recent tendencies in foreign trade; students of English commerce, as well as t reports of the English government give a the failure of English merchants through is the success of German and other rivals thre qualities that Englishmen so sadly want. I Secondary Education regarded these comp to be taken into account in educational more than is now done-might be done, no and girls for the practical work of their rest to make them care for knowledge, to give t and reflection, to implant in them tastes which solaces outside their workaday lives. Not a upon the disadvantages from which young E try and commerce, owing to the superior pr itors in several countries of continental Eur are real." So numerous have been the war their meaning, that English publicists and e recent years that in the preparation of their need for radical change.3

^{&#}x27; JAMES, loc. cit.

² Report of Royal Commission on Secondary Educa

[&]quot;If in this respect, the professional, and still more them all in all—have not reached a level proportione England, and to the abundance of force and ambition in the deficiencies of our secondary education that JAMES BRYCE, in Introduction to Studies in Secondary

³ See London Board of Trade Journal for August, of Citations from Consular Reports" (Annual and M County Council Report on Commercial Education, p. il.

MR. SADLER thus contrasts English with continent are two distinct and alternative principles in educating individuality of development, the other to secure a highest system prevails in the secondary schools in Englishistitution like any other, but also within one and to class of one school, the individual scholars are given

WORK OF THE LONDON BOARD OF TRADE, ETC.

In 1886 commercial education was discussed by the London Chamber of Commerce, and two pamphlets on the subject were issued. From this on English discussion has been active, and English progress in the direction of better business training not inconsiderable. An important stimulus to commercial education in Great Britain was given in 1895, when was established the London School of Economics and Political Science. This school offers highly specialized instruction in definite lines, and is fairly the leader of this branch of education in Great Britain. In the year 1897-98, 378 students were in attendance at the above school, and these were either engaged in or designed for business pursuits.

The London Society of Arts invited the International Congress of Fechnical Education to meet in London in 1897. A leading topic for discussion before this congress was "Commercial Education," and in the discussion frequent reference was made to England; but perhaps the most important consideration of this question in Great Britain, if not in the world, was at the Guildhall Conference of the London Chamber of Commerce in July, 1898. The Chamber of Commerce appointed a representative committee of thirty on commercial education, with Sir Albert K. Rollitt, M. P., president of the chamber, as hamman. Invitations were issued to various trades bodies and educational organizations in the realm, and more than two hundred delegates were named to attend the conference. Representatives were present from boards of trade in Aberdeen, Birmingham, Bradford, Croydon, Dublin, Edinburgh, Greenock, Ipswich, Lancaster, Leeds, Lincoln, Liverpool, London, Newport, Oldham, and Plymouth. Among the representatives of education in attendance were Sir John E. Gorst, M. P.; Michael E. Sadler, Graham Wallace, C. W. Bourne, W. A. S. Hewins, and others well known. Six papers are presented in full in the report of the conference, dealing with the following subjects . " Commercial Education and Secondary Schools;" "Continuation School-

their different gifts, attainments, and future needs. The French system is said to be the antithesis of this, and the German to stand between the two, but much nearer to the French than to the English Problems in Prussian Secondary Education for Boxis, p. 114

^{&#}x27; See Brief Report of the Work of the School since 1895, 1 or dow, 1899.

^{*} Proceedings of the congress; also, Report of the congress, by C. P. Brooks, Report of the United States Commissioner of Education, 1897, 98, chap ix, Advance Sheets

and Evening Classes," "The General Organization of Foreign High-Commercial Education;" "The German Ideal of Higher Commercial Education, as Exemplified in the Leipsic Commercial College," "le thary Schools of Commerce for England;" and "The Organization -Higher Commercial Education." The above papers, each in turn, ver discussed by men engaged in commerce, and those directing education—in all, more than forty contributed to the discussion. The papers fairly stated the issues as to the ideals for commercial education and the means by which these may be realized, and each of them provoked sharp discussion. It was in the discussion that the English on ference was at its best. Sir Albert K. Rollitt, in his opening specidefined commercial education, pointed out the necessity for it, and urged that the representatives of commerce there present should to what was needed, and that the educational experts should show hos the need could be met by supplementing, rather than supplanting the educational machinery already in existence. This speech fairly cuito mizes the proceedings of the important conference.

The London Journal of Education in August, 1898, gave what considered the net results of the Board of Trade conference, as tohomous British boards of trade are compelled to abandon the idea that examinations in commercial subjects are a sufficient stitudius to educate to commerce; second, the opinion was general that a number of sound secondary schools, of a commercial character, ought to be established in various parts of the realm; and third, the belief was common that a satisfactory education is possible in subjects that will prove useful in after life.

At the conclusion of the conference a general committee was appointed to carry out its program, and this in turn appointed a saw committee to draft a manifesto in which should be stated the salient points on which there seemed to be agreement. The report of the sab committee was made to the general committee of the chamber, and by them revised, line by line. The chamber has published the reconmendations as a supplement to the proceedings. In brief, the finding of the sub-committee was, that secondary schools shall have their teaching strengthened on the modern side, with more attention to language geography, physical science, and arithmetic, and that selected pupils, from sixteen to eighteen years of age, be given opportunities for highly specialized commercial instruction in colleges attached to the various local universities. The report of the sub-committee did not taxon

abandoning the chamber of commerce examinations. Results of the London Chamber of Commerce conference are numerous, but chiefly there has come about a better understanding between the London School Board and business men who employ young people, both in regard to secondary-school work and the evening commercial schools. Another outcome of the London Chamber of Commerce Conference is the establishment of the School of Commerce in Liverpool. In its general character this school is not intended to deal with elementary subjects. Rather, it is on broad-gauge plan similar to the London School of Economics, its aim being to afford "training of the most practical and business-like character, well up to date, and capable of direct application to the commerce and trade of the city." The course of the Liverpool school includes among other subjects French, German, Spanish, commercial practice, advanced commercial arithmetic, accounts, economics, and commercial geography.

The successive discussions of the past few years have given to commercial training a new place in English education. Much of the earlier interest in technical and industrial education seems to be diverted to this new channel. Both in legal interpretation and in public thought commercial is now one phase of technical education in England.

THE ENGLISH EVENING CONTINUATION-SCHOOL SCHEME.

The evening continuation school in England offers an interesting development of one branch of commercial instruction. Beginning with 1893 there was a new interest in this form of school, with what is known as Ackland's Code. Higher subjects were introduced, and since then the continuation school has been more liberally regarded. The Education Department, in its regulations, has given recognition to the school, a further edition of whose code appears in 1899; by these regulations the continuation school occupies a definite place in English education. In the new code the detailed schemes give prominence to five groups of subjects of a narrower commercial character, as well as others of more general interest. The continuation schools have

'See chap, vi, Eighth Annual Report of United States Commissioners of Labor, 1894, "Present Status of Industrial Education in Great Britain." The Technical Instruction Act (101d., p. 376) has been interpreted to cover commercial training, See also Report of Royal Commission on Secondary Education, I, pp. 34, 55, 290, 291.

increased most marvelously in number and in enrollment of students' Among the subjects presented in the recent code of regulations are commercial arithmetic, book-keeping, commercial geography, commercial history, commercial correspondence, and office routine. The course in these subjects is sufficiently suggestive to make the following condensation of it seem worth while.

Commercial arithmetic is divided into three stages, as follows First, elementary, in which are short methods of computation, interest and discount problems, mental arithmetic, averages, commission, brokerage, areas and quantities, the metric system, and the coinage of France; second, the intermediate stage, dealing with stocks and shares, profit and loss, bills receivable and payable, with their interest and discounts, the use of logarithms, particularly for problems of compound interest, insurance and annuities, the more important European weights and measures other than the metric, the comage of Germany and the United States, and the weights, measures, and coinage of India; and third, advanced stage in which two courses are open to the student. First, freights, with bills of lading, harbor, light, and other dues; rates of exchange in transactions with home and foreign bills; comage of other European countries, and of China and Japan -second, debentures, preference stock, ordinary stock, profits and dividends; liabilities, solvency and liquidation, banker's interest. calculation of rates and taxes, and compound interest with special ref erence to the repayment of loans."

Book-keeping. The full course of the continuation school in book-keeping includes instruction in three stages, elementary, intermediate, and advanced. Preparatory to the elementary stage, it is expected that a student shall have a satisfactory grounding in commercial and mental arithmetic. In the elementary stage the student is taught a double-entry system with simple accounts, necessitating the use of the following books: waste-book, bought day-book, sold day-book cash-book, journal, and ledger. He is trained in the making of invoices statements, the writing of checks, and is given the ability to deal with simple sets of accounts. In the intermediate stage he is taught to over

	Schools	Attendance
1ln 1895	2619	164,233
1898	3474	254.943
	·London Journal of	Education, October, 1899

and keep the following books: journal, bought day-book, sold day-book.

² Code of Regulations, p. 30

returns-book (inward and outward), cash-book, and petty cash-book, billbook, ledger (sold and bought). In connection with these books instruction is given in stock-taking, trial balance, balance sheet, etc., and in the dissection and summarizing of subsidiary books, and the use of more narrowly specialized terms, such as assignment, royalties, free on board, bonded goods, underwriter, average, clearing a vessel, vendue, script, etc. Instruction is given in the writing out of common forms of consignment notes, bills, credit slips, and in the making of entries for out-going and in-coming consignments. In the advanced stage there is considered the nature of capital, whether as money or property, stocks, shares, classification of capital, revenue accounts, the use of a private ledger, also the establishment and management of sinking funds, investment accounts, public, railway, and municipal accounts. Instruction is given involving transactions by consignments, dishonored bills and bad debts; partnership is treated, and the division made of profits or losses; the nature and purposes of allowances to be made for depreciation in value of property is also made clear.

Commercial geography.—Preceding this course there is a good grounding in the physical features of the earth's crust, the variations in climate, animal, and vegetable life. Commercial geography is presented as dealing with the geographical distribution of commodities, chiefly food, with raw and manufactured products and minerals, and with the various aids and hindrances to trade. This course is in turn divided into three stages—elementary, intermediate, and advanced. In the elementary stage the subject of study is mainly the British Isles, and their means of transit by trade routes to the most important countries of the world. In the intermediate stage one British colony and one foreign country are studied, while in the advanced stage some one branch of British trade is thoroughly investigated along the lines of cultivation or production of the raw material, its distribution and conveyance, markets, manufacture, markets for finished products, duties and tariffs, competition of other countries, etc.*

Commercial history.—In this course there are three stages, as above, and as the basis of each there is a division according to time: first, when trade was carried on entirely by means of rivers; second, when men began to make use of the narrow seas, like the Mediterranean, and, third, when commerce became world-wide in its extent.

¹ Ibid., pp. 40, 41.

^{* /}bid., pp 42, 43.

In the first period examples are taken from oriental history, the civilizations of the Nile and Mesopotamian valleys, and in modern times from the river valleys of China, the rivers of Africa, and the inland rivers of North America-such as the St. Lawrence and Mississippi. In the second period the river commerce is found to be continued, but caravans connect the great river systems, and the inland sea is made a highway of trade. In all the MiddleAges the commerce is shown to be of this second stage. The relation of England to this form of commerce is studied, and the influence of the Norman Conquest pointed out as opening up England to the continent. Following this there is a study of mediæval England, a producing rather than a manufacturing country, an account of the products and staples of trade, the rise of trade guilds, the introduction of bankers, the enactment of English commercial legislation, the influence of great wars, and the begin ning of the English navy. In the third stage there is traced the rise of modern commerce, following the growth of geographical discovery In this period commerce becomes oceanic, and the course of trade is diverted. England participates in the benefits of the new discoveries, there is also an account of the rise of Holland, with a statement of the struggle between the English and the Dutch, the various navigation acts, the foundation of the first English colonies, the development of the East India Company, and the establishment of the Bank of England. This is followed by the commercial expansion of England in the eighteenth and nineteenth centuries.*

Commercial correspondence and office routine.— This division has a two-years' course. The first is designed for boys and girls who leave the day school, to furnish them with the details which are expected of them when they enter upon the minor duties of business life. The second year's course is planned for junior clerks and those engaged in subordinate positions in offices, warehouses, etc. The first year's course deals with such questions as the answering of advertisements, letter copying, folding letters, addressing envelopes, registration and insurance of letters, indexing, telegrams, telephone messages, forwarding goods, remitting money, various forms of receipts, also a thorough course in business correspondence, treating differences between private and official letters, various parts of a letter, and the abbreviations made use of in correspondence. In the second year's course attention is had to the preparation of invoices, sales

[&]quot; /bid., pp 44-6.

accounts, with their discount and interest calculation, the making up of price lists, advanced instruction in railway rates and cable systems, the use of various forms of warehouse books, bank deposit and current accounts pass books, the market reports, shipment of merchandise, advanced business correspondence, preparation of circulars, pamphlets, and advertisements, compilation of catalogues, correction of printer's errors and proofs, the routine of printing, with the study of various forms of insurance.'

OTHER MEASURES PROPOSED FOR COMMERCIAL EDUCATION.

The new University of London is committed to commercial education through a promise of the commissioners appointed to draft its constitution, that a faculty of commercial instruction will be included.* Sir M. Hicks-Beach, in a late address preceding the distribution of prizes gained under the London Chamber of Commerce examination schemes, urged strongly for a faculty of commerce at the University of London, and voiced the opinion that commercial education might well become a part of the whole system of public instruction in England, if it were properly organized under the Board of Education Act.¹

In May, 1897, the Technical Education Board of the London County Council appointed a special sub-committee to inquire into the agencies then in existence for giving commercial instruction in London, and to suggest a plan for establishing other agencies or increasing the efficiency of those existing. This committee was empowered to incur expense in pursuing its investigation, to invite expert educators and practical business men to attend its sessions, for the purpose of giving evidence.4 Among those who were before the committee were Professor Layton, of the Superior Institute of Commerce at Antwerp, Professor W. A. S. Hewins, of the London School of Economics and Political Science, also experienced bankers, and merchants. The investigation of this committee was so systematic, and its conclusions so sound, that they may be taken as the last word on the present discussion of this subject in England. The similarity of conditions in many American cities warrants a selection at some length from the recommendations of the committee:

^{*} Ibid., pp. 47 -9.

[&]quot;Municipal Affairs (London and New York), September, 1800, pp. 511, 512,

London Times (weekly), November 17, 1804

[·] Kepert, p. t.

That further and better provision for commercial education is urgently required in London; and that it should be the object of the Technical Education Board, so far as its resources permit, and so far as is consistent with other claims, to assist in supplying this need.

That the commercial education required is of several distinct grades, and must be adapted to the different needs of many distinct groups.

That, to meet the needs of those who enter business offices about the age of fourteen, day continuation schools are required, which should give a two years' course of training specially adapted for commercial life.

That it is desirable that there should be in many of the public secondary day schools in London of the second grade departments devoting themselves primarily and avowedly to the preparation for commercial life of boys who will leave school at sixteen; that in such departments, while a good general education should be given, special attention should be devoted to modern languages in such a way as to turn out pupils able to speak and correspond fluently in at least two modern languages; to the teaching of arithmetic so as to secure perfect facility in the use of the metric system; and to insuring a good general acquaintance with the commercial geography of foreign countries.

That it is desirable that there should be provided in London in at least one public secondary day school of the first grade a department devoting itself primarily and avowedly to the preparation for business life of boys leaving school at eighteen or nineteen, that the curriculum of such department should not lead up to a classical or mathematical career at the universities, but should qualify its pupils either to enter the higher ranks of commercial life or to pursue an advanced course of study in the economic and commercial faculty of the new London University, or in other institutions of higher commercial education.

That it is desirable that a certain number of senior county scholars should go through a university course in subjects of higher commercial education and that, in addition, traveling scholarships be offered to enable teachers of some experience to study in higher commercial institutions abroad, in order to qualify themselves as teachers of commercial subjects.

That efforts be made by the board to extend, improve and coordinate the teaching of commercial subjects in evening classes, especially in such depart ments as foreign languages, the metric system of weights and measures, economics, commercial history and geography, shorthand and book-keeping, and that it be referred to the Polytechnics sub-Committee to consider the desirability of obtaining a special report upon the extent, quality and results of the classes in those subjects at the several polytechnics.

That special efforts be made by the board to obtain the cooperation of representatives of different branches of the business world in carrying out this

program; and that negotiations be 'entered into with the London Chamber of Commerce, the Institute of Bankers, the Institute of Actuaries, and other associations holding examinations in commercial subjects, with a view to securing their cooperation, especially in obtaining the recognition by commercial men of leaving certificates, and in securing a closer union between the teaching and examining bodies.'

GERMANY AND AUSTRIA.

COMMERCIAL EDUCATION IN GERMANY IN RELATION TO GENERAL EDUCATION.

Much has been said in recent years about the influence that schools of commerce exert in advancing German maritime and commercial interests. Since 1873 Germany has had more marked success in the extension of her foreign trade than has any other world power; particularly has she made remarkable progress in the last ten years. No doubt there is a relation between the German commercial system and the German plan of education, but to say that commercial success has been dependent upon commercial education, would be, probably, stating an effect for a cause. German success cannot be separated from German character, and both in the German's plan of education and in his commercial system, there are marked influence of his national traits.

The Germans, however, have felt that if their industry and trade were to be on a stable basis, intelligence must be given to those who are directors. In 1897 von Bülow, in a speech to the German Imperial Diet, declared what is the recent and the present policy of the German nation. "We are, I must admit, of the opinion that it is not advisable to exclude Germany, at the outset, in countries with a future before them, from engaging in competition with other nations. The days when the German abandoned to one of his neighbors the earth, and to another the sea, and when he reserved for himself the heavens above—the throne of pure doctrinaire theory—these days are past." But German success in commercial lines has been due quite as much, if not more, to sound modern education as to technical instruction on commercial subjects. It unquestionably is true in the United States as the British consular report points out as true of

Report of sub Committee, p. xv.

^{*}British Consular Report, "Commercial Education in Germany, November, 1898, p. 4 See also, Report on the Development of Commercial, Industrial, Maritime, and Traffic Interests in Germany, 1871 to 1898, same series, January, 1899.

³ Report cited in Sauler, Problems in Prussian Secondary Education, p. 34. A more recent remark of von Bullow is that in the coming centuries Germany must become either the anythor or the hammer.

England, that the effect of commercial education in Germany has been much overrated. Says Sir Philip Magnus:

It is not only—nor, indeed, principally—because Germany possesses numerous schools of commerce that she sends forth hosts of well-trained young men to occupy the best posts in foreign commercial houses, and to establish trading stations in all parts of the globe. It is mainly because her system of secondary education is adapted to the wants of the people. Her sons are trained to observe and to think, and what they learn they can utilize in after life. This is not so with us. What we most want are good higher elementary or middle trade schools, and a systematic organization of our secondary education.'

The states that make up the present German Empire had, in 1850, but seventeen schools of commerce. These same states have at the present time seventy-three such schools, of which sixteen are recognized by the government and privileged to grant certificates for one year of military service. In the advanced schools of Germany, a recent foreign writer has estimated, there are eleven to twelve thousand students receiving commercial instruction, or more than ten times as many as are receiving such instruction in France. The German government has not taken commercial education under state control, but through the privileges extended to certificates of commercial schools it exercises an influence upon the curricula and the teaching. This influence tends to keep the middle-class commercial schools much like the Realschulen.

KINDS OF GERMAN COMMERCIAL SCHOOLS, AND THE "KAUFMAN-NISCHE FORTBILDUNGSSCHULEN."

The schools for commercial instruction in Germany are of three sorts: lower, middle, and higher.

The lower, or primary, commercial schools (Kaufmannische Fort bildungsschulen) are for the continuation and extension of mercantile knowledge; these are also called schools for apprentices. In these schools the instruction is limited, on an average, to ten hours a week, designed for those who are engaged during the day, so that classes are held in the morning or evening. These schools are sometimes independent, sometimes connected with higher commercial schools. In

^{&#}x27;Industrial Education, p. 95. This was written more than ten years ago, and at that time the state of commercial education in Germany was much below its state now See British Consular Report, as above, p. 28.

^{*}GASTON CADOUX,"L'Enseignement Commercial," Le Monde Moderne, August, 1890.

3 British Consular Report, p. 80

1891, in the German Empire, there were 165 Kaufmannische Fortbildungsschulen, of which sixty-five had been started since 1885. In Prussia there were then seventy-seven institutions. In 1897, in Prussia alone, there were 186 of these schools, with an attendance of 15,000.

*British Consular Report, "Commercial Education in Germany," pp. 8, 9, 18. Statistics are not available on other states than Prussia (ibid., p. 27). See below for Kaufmannische Schulen in Prussia.

KAUFMANNISCHE FORTBILDUNGSSCHULEN IN PRUSSIA.

No.	Government District	No. of	No of Pupils	
	Overdiffert Printing	Schools	Male	Female
	Aachen		162	
2	Arnsberg	8	687	
3	Aurich -	2	127	
4	Breslau -	20	899	34
5	Bromberg			- 34
6	Cassel	5	386	
7	Coblenz	2	141	
8	Coln		416	243
9	Dantzig	1	152	- 13
IO	Dusseldorf -	8	969	
11	Erfurt	3 8	340	
12	Frankfurt, a. d. O	8	410	2
13	Gumbinnen	4	206	
14	Hanover	3 8	592	1
15	Hudesheim		388	
16	Konigsberg -	2	65	
17	Koslin	6	119	
18	Liegnitz -	13	775	15
19	Luneburg	6	322	
20	Magdeburg -	14	1030	
21	Martenwerder -		203	
22	Merseburg -	5	564	3
23	Minden	4	452	
24	Munster	<u> </u>		
25	Oppeln	28	1419	
26	Osnabruck	3	283	
27	Posen -	3	312	1
	Potsdam -	5	261	
29	Schleswig	2	290	
30	Sigmaringen			-
31	Stade	I	26	
32	Stettin Stralsund	2	116	
33	Trier	2	72	
34	Wiesbaden -	ì	58	
36	Stadt Berlin	3	860	diam -
30	Oladi Octiffi	5	1833	294
	Total	186	14935	591

British Consular Report, "Commercial Education in Germany," p. 18.

MIDDLE SCHOOLS OF COMMERCE

A higher order of commercial instruction than is given in the foregoing, is imparted in the so-called Handelsschulen, organized sometimes as independent establishments, as for example at Leipzig. Dresden. Chemnitz, and sometimes connected with other public schools, as at Munich, and Frankfort-on-the-Main. These schools are designed for young men, who, before entering on a business career, wish to devote some years to the cultivation of higher branches of commercial knowledge, and to perfect themselves in modern languages. The best known of these middle-class commercial schools is that in the city of Leipzig. the offentliche Handelslehranstalt, which has both the primary and the more advanced courses. The second division fairly corresponds with our secondary schools, and may be taken as a type for our high schools of commerce, as it has been for many other schools in Europe. This is the oldest of the schools of its class, and, according to Professor James and the more recent British consular report, it is the best example of such schools.' This school has, besides the elementary division which properly belongs to the Kaufmannische Fortbildungsschule class, a three-years' course of study as follows:

	-		
	First	Second	Thed
	year).est.	ACN
REQUIRED			
German	4	3	3
Figlish language and correspondence	5		5
French language and correspondence	5	a l	5
Mathematics -	5 3 5 2	7	A
Mercantile arithmetic	5	3	2
Physics -	2	2	_
Technology -		_	2
Chemistry	_ :	2	2
Raw materials of commerce (Warenkunge)		_ !	1
General and commercial geography	2	2 1	2
General and commercial history	2	2	2
Commercial information, laws of commerce and exchange		2	i
Office work, correspondence and book-keeping		2 1	2
National political economy		3	2
Calligraphy	2	2	
Stenography -	2	- 7	1
Gymnastics	2	2	,
ELECTIVES		- î	
italian ·		2	2
Spanish		-	7
Russian		3	
11425/40		3 1	

⁻Satzungen fur die offentliche Handelslehranstalt zu Leipzig, p. 17.

²]AMES, Education of Business Men in Europe, p. 156. British Consular Report. November, 1898, p. 7.

RECENT FOREIGN EXPERIENCE

THE LEIPTIG HANDPLSHOCHSCHULE.

By far the most interesting recent commercial education experiment in Germany is the Leipzig Handelshochschule, inaugurated in April, 1898. For years there had been opposition to higher schools of commerce in Germany, on the ground that they would tend to increase the influence of the industrial classes, and so strengthen the power of socialism, but in recent years the need of higher commercial education has been so keenly felt that this prejudice has ceased to hinder active measures.' In June, 1897, the Second Congress of Commercial Edu cation met in Leipzig, and the question of higher schools was discussed at length. As a means of getting a basis for discussion, a large number of letters were addressed to leading merchants, tradesmen, merchant unions, Handelsschule men, professors, and others. More than 300 replies were received, of which 250 were in support of the proposal for higher schools.* The Leipzig Chamber of Commerce, with some support from the Saxon government, fathered the school, and it was inaugurated. There are eleven men who constitute a senate of control, under a more general supervision of the Saxon home office. The senate is made up as follows: one member of the Saxon government, and one of the municipality of Leipzig, the president and two other members of the Chamber of Commerce, three professors of the Uni versity of Leipzig, two teachers of the public commercial middle school, and a director of studies.

Those who attend the Leipzig school are of two classes—students regularly enrolled for work, and those who are in attendance upon lectures as auditors. There are no entrance examinations for admission to this school, but the conditions imposed are intended to make the entrance as difficult as it is to other universities in Germany. The following is the list of persons who may be admitted: first, commercial men who have obtained the privilege of one year's inilitary service (meant for those who have been at middle commercial schools) and who have in addition completed their three years' term as apprentices in some mercantile establishment, second, those who have left the higher ordinary schools (Gymnasien, Realgymnasien, and Oberrealschulen).

^{&#}x27;T. BAILEY SAUNDERS, in London Times, November 24, 1898.

This is directed to the universities as well. See Rossett, German Higher Schools, p. 414

^{*} KAYDE, Denkschreft der Handelshochschule in Leipeig, p. 5.

^{1 /}bid , p. 23.

third, teachers who have been at German teachers' seminaries, and so have passed the second examination there; or fourth, foreigners to have a preparation that is equivalent to above, and who are twenty years of age.'

During the first semester there were ninety-seven students is attendance, of whom twenty—ten Germans and ten foreigners—left is conclusion. With the opening of the second semester in October 1898, there was an increase of seventy-two students, of whom thirty five were merchants, three book-sellers (one a former postal official) eleven formerly at universities, and thirteen had leaving-certificates of higher schools, while nine were teachers. In the Leipzig school, as it all the German universities, attendance upon exercises is voluntary and one fear expressed was that the course would not mean sufficient earnestness, but in the second semester the reports upon the industry of the students were very favorable; they attended faithfully to work and make diligent use of the libraries of the University and the Chamber of Commerce, etc. Technical excursions are arranged to the various centers of industry in Saxony, and on these excursions student have been entertained by manufacturers."

The whole dealing with the Handelshochschule has been largely experimental. About the only rule laid down is that the policy shall be liberal, but the council reserve great latitude in the working out of this policy. No definite standard was fixed as a requirement for gaining a diploma, and the whole scheme of organization is flexible.

The instruction in the Hochschule consists of two sorts: first, returns; second, practical teaching. The following twelve courses of lectures are announced. Theoretical and practical political economic finance, substances of goods and technology, commercial geography, economic and commercial history, general law, commercial law, law of bankruptcy, laws relating to industry and insurance, international law, colonial policy, and lectures for teachers of commercial subjects in addition to these courses there are other lectures on a variety of subjects open to the students of the Hochschule in the Leipzig University Under the second head, practical teaching, the following courses are given: Commercial and statistical calculations, book-keeping, German

² British Consular Report, "Commercial High School at Lespzig," p. 7, and Dead wheelf der Handelshochschule, pp. 18, 19,

[&]quot; Der Geschaftsfreund, Confection Zeitung, Berlin, December 3, 1898.

British Diplomatic and Consular Report,"Commercial High School at 1 giping, 90

commercial correspondence and other office work, laboratory work in physics and chemistry, French and English commercial correspondence, Italian, Spanish, and Russian languages, shorthand and typewriter practice. In addition to the foregoing liberal provision for language study, other languages are announced to be given if the demand for them arises. The auditor or lecture-visitor is privileged to attend the above courses under certain rules, and for such attendance a certificate is issued.

The Leipzig higher school plans for the preparation of teachers for other commercial schools, and to this end a seminary is offered, open to the following persons: first, students of the Leipzig University and other properly educated candidates for commercial teacherships; second, teachers from seminaries; third, persons who have obtained the privilege of one year's military service, and have been in business for at least six years, who wish to become teachers of commercial subjects.*

DEMAND FOR FURTHER COMMERCIAL INSTRUCTION IN GERMANY.

The exclusive commercial teaching in Germany is comparatively slight. The Kaufmannische Fortbildungsschulen are not well attended, and compulsory attendance measures have been considered, in some cases resorted to, as a means of accomplishing what seems desirable. The German feeling for commercial education is spreading, however, and frequently this feeling shows itself in efforts to change methods of instruction, inaugurate new institutions, etc. It was the policy of the Prussian government, at a recent session of the Landtag, to provide a sum of money, not only for the education of clerks, but also for the establishment of a new department of university teaching. From this recent agitation the Leipzig Handelshochschule has taken its rise, and in many other parts of Germany the results are being seen in the proposals to add special departments for commercial instruction to existing technical high schools and to universities. A strong society for the promotion of mercantile education has been

and Political Science, p. 7.

Denkichrist, pp. 19-22 Consular Report, pp. 7-9.

On the question of curriculum, see Brief Report of the London School of Economics

^{*} Dewkschrift, pp. 22, 23.

A more recent report on the work of the Handelshochschule is announced, but the announcement comes too late to make use of the report in this account.

Bettish Consular Report, p. 27

recently founded in Germany, taking in the various states of the German Empire, and made up of representative men of influence to every walk in life. The society comprises in its membership touried governments, seventy-seven chambers of commerce, forty-nine munic palities, one hundred and eight commercial societies, one hundred and one commercial schools, one hundred and nineteen large firms, and wealthy private individuals. Already the society has obtained the recognition of fourteen governments in grants of pecuniary aid On February 1, 1898, there was convened in Berlin, at the invitation of the Prossian minister of trade, a representative gathering of burguase ters, men from commerce and industry, and head masters of commerend schools, to consider questions dealing with the development and extension of commercial education, and the state of the Kaufmannische Fortbildungsschulen, the Handelsschulen and the House Handelsschulen. After a discussion, reported as exhaustive, as is whether it was advisable and necessary in Prussia to establish, in 221tion to commercial institutions now in existence, new and independent ent high schools of commerce, or whether these should be placed a conjunction with the universities, the decision was reached that int institutions be organized in connection with existing universities."

COMMERCIAL EDUCATION IN AUSTRIA.

When Alexander Dallas Bache inspected schools in Europe of 1839, he found well developed commercial instruction in Austria, and in his report furnished a course of study then offered in the city of Vienna, but in Austria for many years, as in Germany and France, commercial instruction was very limited in extent and of doubtful success. The Handels-Akademieen of Austria were designed by prominent tradesmen for the training of their sons to succeed them in business, but no appeal was made to the community at large. The fees for attendance upon these schools limited them to sons of the wealthy. From 1868 to 1888, commercial education was seriously interfered with further, by special restrictions of the government in the matter of influence service. In 1888 the minister of public instruction undertook a general reorganization of commercial education, reforms being attempted

^{*} Bestish Consular Report. "Commercial Education in Germany," pp . 3. 27

^{*} Inducation in Lurope, pp. 487, 588

British Consular Report. "Commercial Education in Austria," pp 3, 4

^{· /}bid., pp. 7, 8.

RECENT FOREIGN EXPERIENCE

in the following directions: first, in the organization of the schools themselves; second, in the matter of school literature; and third, in the matter of teachers. The schools were systematized under three heads: first, higher commercial schools with special courses; second, lower (middle) commercial schools; and third, Fortbildungsschulen, for apprentices. In conjunction with this plan of classification there were given uniform courses of study in which the most of the work is obligatory. Copies of these are furnished."

CURRICULUM OF A MERCANTILE FORTBILDUNGSSCHULE.

	Numb	Number of hours per week		
	ist year	od year	3d year	
Language of instruction (Unterrichtssprache) -	2			
Arithmetic	3	2	1 .	
Book-keeping and mercantile correspondence	<u> </u>	2	2	
Knowledge of trade and banking affairs			2	
Geography	ı	2	1	
Technical knowledge of goods	L	! —	2	
Calligraphy	2	2	_	

CURRICULUM OF A SECONDARY COMMERCIAL SCHOOL.

	Number of hours per week		
	Preparatory	sat year	2d year
Obligatory subjects.			
Divinity	2	+b	
Language of instruction (Unterrichtssprache)	6	4	3
Arithmetic	6	4	4
Mercantile correspondence and routine of office work	1 - 1	3	4*)
Book-keeping		3	4* 8
Knowledge of trade and of banking affairs	1 — 1	3	4=3
Geography	3	3	3
Natural history	4		
Natural philosophy	1 4 1	_	
Knowledge of merchandise		3	3
Calligraphy	2	3	ī
Stenography	! - }	2	2
Total	27	28	28
Comparatively obligatory subjects (French, Italian,	'		
English, and Czech)	_	6	6

⁻ British Consular Report, "Commercial Education in Austria," p. 10.

¹ Ibid., 8, 9.

[&]quot;First term.

³Second term.

CURRICULUM OF A HIGHER COMMERCIAL SCHOOL.

	Number of hours per week			
	Prepara-	18t year	ad year	3d year
A Obligatory subjects.				
t. Language of instruction (Unterrichts- sprache 2. French 3. Figure 4. Caech or Italian 5. Mereautile arithmetic 6. Mathematics (general and political arithmetic, geometry) 7. Mereautile correspondence and routine of office work 8. Book-keeping 9. Model countinghouse or office (Muster Comptor) 10. Commercial knowledge 11. Laws of exchange 12. Trade laws and privileges 13. Political economy 14. Geography 15. History 16. Natural history 17. Natural philosophy 18. Phys.cs 19. Chemistry 20. Knowledge of merchandise and technology 21. Calligraphy	4 4 4 3	355554 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 3 2 2 3 2 2 2 2 3 2 3 2	3 4 5 4 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
22. Stenography	3	2	2	-
Total (with regard to the fact that only two non-German languages may be learned)	31	35	35 or 34	35 or 34
B. Optional subjects. Practical experiments in the laboratory (chemistry and knowledge of merchandise)	_	_	_	4
Gymnastics	2	2	2	2

-- Commercial Education in Austria, p. 9

NUMBER, CHARACTER, AND CONTROL OF AUSTRIAN SCHOOLS.

As the best indication of the number, size, character, and method of control of the various schools for commercial instruction in Austria, the following table is adapted from the British Diplomatic and Consulor Report, presented by the Foreign Office in March, 1899:1

First Term.

^{*}Second term.

³ Pp. 17 ff. Statistics for schools and attendance, also in Gaston Capoux's article, "L'Enseignement Commercial."

	1			I	
ą,	Supported by		Merchana, Guild Merchana, Guild Government Government Merchana, Guild Government Covernment Town Town Merchana, Guild Association Government Town Town Government Town Town Government Town Government Town Town Town Town Town Town Town Town	iducation in Austria," pp. 17-21.	
- 1897- TASSES.	Pounded	1	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	mercial E	
AUSTRIAN CUMMERCIAL SCHOOLS - 1897-8. I. HIGHER SCHOOLS WITH THREE CLASSES.	Description of school	(a) Weth Government Subvension	Commercial for Girls Righer Councertal for Girls Righer Councertal for Girls Commercial	British Diplomatic and Consular Report, "Commercial Education in Austria," pp. 17–23.	
	No of students			Ì	
	Lucation		Perek Frague Frague Frague Frague Frague Dew Bydkow Frague Frague Frague Frague Frague Frague Frague Frague Mahr Ostron Mahr Ostron Mahr Ostron Mahr Ostron Mahr Arabad Mahr Ostron Frague Mahr Ostron Frague Mahr Ostron Frague Mahr Frabad Frague Frague Frague Mahr Ostron Mahr Frabad Mahr Genebal Mahr Frabad Mahr Genebal Mahr Frabad Mahr Genebal Mahr Frabad Mahr Hadagh Frague Frag		
	No.		* *** *** ** * * * * * * * * * * * * *		

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FRANCE AND BELGIUM.

HOW COMMERCIAL SCHOOLS ARE REGARDED IN FRANCE, AND SORTS OF SCHOOLS.

Although commercial instruction has been long established in France, the people in general were not prepared for it, and commercial schools have had, until very recently, slight success, if they can be said even now, to be successful. The French people have looked with reproach upon la carrière mercantile, and this has had a marked effect upon the commercial schools. M. Jacquemart, inspector general of technical education in France, in a report in 1889. called attention to the facts that while there were 400,000 youths annually entering on a business career, only about 2,000 of these were getting commercial instruction.' A more recent account of commer cial training by a Frenchman speaks of the comparatively small number who are prepared for entrance upon mercantile pursuits as a "microscopic phalanx".* But in the past few years commercial begins to claim a place with other forms of technical education in France, and France looks to education as one of the means for regaining some of her lost trade. From many sides recent French writers have complained of the insufficiency of technical and commercial instruction, and have instanced the superior training in these lines given by rival nations. more notably by Germany.3

Commercial schools in France are primary and intermediate, evening schools for males and females, secondary commercial schools, and superior schools of commerce. In part, these are under state supervision, and in part they are organized privately; with regard to the private institutions, many of them secure state aid as a partial support

PRIMARY AND INTERMEDIATE SCHOOLS, PUBLIC AND PRIVATE.

Primary technical instruction in France in recent years has been under the joint control of the ministers of public instruction and of commerce and industry. This has given to such schools an anomalous organization. By the financial act of 1892, those schools in which the

- * British Consular Report. "Commercial Education in France," p. 3.
- *GASTON CADOUX, in Le Monde Moderne, August, 1899.
- 1 Ibid., p. 205. DEMOLINS. Anglo-Saxon Superiority and MARCEL BICHON in I. Economiste Français.
- * TEEGAN, Technical, Industrial, and Commercial Education in France, p. 114, also British Consular Report.

instruction was chiefly industrial or commercial, were to be transferred to the sole control of the minister of commerce and industry. Schools have been transferred since that act, and the transference continues, some schools having gone over in 1898, and others again in 1899. When the schools are so transferred, they are converted into practical industrial and commercial schools. Control by the minister of commerce and industry gains in favor in France. In a debate in the French Chamber of Deputies in 1899, it was proposed to transfer the three state schools of apprentices to this ministry, and although this proposition failed, it can be accepted as indicating the present trend of educational sentiment.

In 1802, local divisions, departments, and communes were authorized to organize commercial and industrial schools, subject, however, to the approval of the minister of commerce and industry. The local organization must guarantee a part of the expenses of such schools for not less than five years. Such industrial and commercial institutions are divided into two sections, one of which is distinctively commercial. These schools are supervised by a council of improvement composed of the prefect or mayor, the inspector of commercial instruction of the district, four members nominated by the general or municipal council, and one member by the minister of con erce and industry. The duties of this council are as follows: first, a monthly visitation of the schools; second, to receive and consider reports from the director as to expenditure, and the general condition of the school; third, to attend the final examinations; and fourth, to find employment for the pupils at the completion of their studies. Instruction is gratuitous in these schools, and pupils are day scholars, except in special instances in which resident scholarships are granted by the state or founded by some local provision. Pupils are admitted at the age of twelve if in the possession of a certificate of elementary education; at thirteen such certificate is not necessary, an examination being made to satisfy the conditions of admission. The course of study in these schools occupies three years, at the successful completion of which, a certificate is granted. The hours per week are thirty-nine and a half, forty and a half, and forty-two, respectively for the first, second, and third years, and of these sixteen, twenty-two and a half and twenty-seven are given to commercial subjects. The hours in the schools for girls are slightly less. The subjects of the official curriculum are as follows: For boys,

^{&#}x27;Consular Report, p. 6.

commerce and book-keeping, one foreign language, arithmetic and algebra, geography, penmanship, chemistry, and commodities, common and commercial law, commercial economy. French language, drawing, history, natural history and hygiene, geometry and elementary physics. The course for girls is substantially the same, with the addition of "morale," sewing and domestic economy." The following statement of the director of the Boulogne Practical Commercial School, was made at the International Congress on Technical Education in 1895, and it is furnished as setting forth the ideals and methods of such schools.

During the first year the study of the elements of commerce and of commercial documents alone is undertaken. Pupils are required to reproduce the latter by means of numerous exercises, performed both singly and in classes, which entail a certain amount of book-keeping.

This teaching is supplemented during the second year by instruction in commerce (bearing principally upon exchanges, customs, bonded and general warehouses), also by the theoretical and practical study of book-keping. During the second term pupils begin to apply their knowledge by keeping a complete set of books, and composing all the documents relating to transactions therein contained.

During the third year this course of study is completed by further additions to the commercial instruction, including principally banking and calculation of current accounts; by a more exhaustive study of book-keeping relating to the accounts of companies, and finally, by the performance of a task (usually connected with a company) into which the principal difficulties of book-keeping are introduced.

During the whole course the commercial bureau is organized to reproduce as faithfully as possible the actual methods employed in business.

Of modern languages English alone is taught (in this particular school). At the end of the third year pupils undergo an examination in the presence of the Council of Improvement and the staff of the school, at the termination of which the diplomas are awarded.

In addition to the so-called practical schools of commerce, there are also what are known as superior primary professional schools, under the joint supervision of the minister of public instruction, and the minister of commerce and industry. Though these schools are chiefly industrial, some of them give commercial instruction, elementary in type and practical in character. In the school of this class at Bourdeaux, students are organized as a commercial society, carrying on

^{&#}x27; /bid., pp. 7. 8.

^{*}Cited in Consular Report, "Commercial Education in France," p. 8

fictitious transactions. The subjects of instruction in such schools are book-keeping and commercial law, "morale," French language and "commercial style," economic and industrial geography, arithmetic, modern languages, penmanship, drawing, physical exercise, and domestic economy.

In addition to these schools under government supervision there are others of a similar grade, under private management, for example, at Nancy and the Martin Foundation School at Lyons. There are also private institutions in Paris and other cities, which are similar to the business colleges of the United States.²

SCHOOLS UNDER PRIVATE CONTROL.

The schools not under government supervision are much the more important division in France. The instruction carried on under the direction of the Paris Chamber of Commerce is the most complete known in France, and in its various forms has served as a model for other schools throughout the country. The Chamber of Commerce furnishes instruction of three distinct grades to meet the needs of three sorts of people. First, free evening classes, in which those engaged during the day, both men and women, may get tuition which they can utilize in bettering their condition in life; second, a commercial school of secondary grade, which will serve to give educated and intelligent employés for business positions; and third, superior schools, the aim of which is to equip men for responsible directive positions in commercial houses, to furnish men who are able to turn their knowledge to good account in the furthering of foreign trade.

Free evening classes have been popular in France as in England, and not Paris only, but many other cities now have such classes, in which commercial instruction is given both to men and women, to adults and young people. The Paris Chamber of Commerce conducts its evening classes three times a week for men and three times a week for women, and these are largely attended. In 1892 there were at the Trudaine Commercial School in Paris, 200 women pupils of the evening classes, and 800 men. The following are some of the places at which instruction in commercial subjects is given to evening classes. The various primary schools of Paris for boys and

² Ibid., pp. 9-11.

² Commercial Instruction Organized by the Paris Counter of Commerce, a countpresence, at Columbian Exposition, 1893, p. 0

girls; classes of the Paris Chamber of Commerce at the Avenue Trudame, and the Avenue de la République schools; at the Polytechnic and Philotechnic Associations, and the classes of the Paris Academic Society of Book-keeping, with branches at Marseilles, Valenciennes, and Nantes, etc.; and classes of the Philomathic Society of Bordeaux.

THE PARIS AVENUE TRUDAINE COMMERCIAL SCHOOL.

The commercial school in the Avenue Trudame, Paris, is regarded as a type of its class. The purpose of the Paris Chamber in founding this school, in 1863, was to serve commerce by preparing youths for positions where they would serve as active, intelligent helpers; and secondly, to make possible a career at once certain, lucrative, and honorable to boys who are industrious and well disposed. The object was to give commercial instruction primarily, but it has been the purpose of this school to turn out students who would be more than mere business machines; recent report is to the effect that the minds of the director and his staff are much more intent on general education than on the narrower special and technical business instruction. That the plans of the Chamber of Commerce have not failed is shown by the unusual demand which is made for students of this school. The hamber's report in 1893 spoke of "the daily increasing earnestness with which men of business and bankers seek for pupils." It is said that the demand for those trained in the Trudaine school is always largely in excess of the supply, although those in attendance number approximately 500 annually. For the instruction there is a nominal tuition fee charged, but both by state and private establishment there bave made available a liberal number - more than 200 - scholarships in this school. In addition to the four-year curriculum, instruction is given in a preparatory course. Students are admitted into the regular [four-year] course at the age of twelve and a half, but they may be admitted into the preparatory course from the age of eight."

The Trudaine school is fairly equivalent in grade to an American high school, and the possibilities in the Trudaine school would seem within the range of accomplishment for us. The curriculum of studies is as follows: French language and literature, English, German, Italian, and Spanish languages, commercial history and geography, arithmetic with elementary geometry, and special attention to mental

^{1 /}bid., p. 24.

British Consular Report, as above, p. 13

British Communiar Report, pp 10, 11, Chamber of Commerce Report, pp 9 22.

arithmetic and rapid calculation. All branches of book-keeping, permanship, practical geometry and drawing, phonography and tipe writing, with lectures in commercial law, political economy, and the elements of physical science, complete the course.'

SUPERIOR COMMERCIAL SCHOOLS,

Superior schools of commerce in France were first recognized by state decree in 1890, extending privileges in the matter of freed on from military service. This was followed with a further declaration with regard to the supervision of entrance examinations by the state the nature of the curriculum, and the management of the schools Later, the schools were recognized in other matters, and may receive subventions from the state. When commercial schools received state recognition, they came under the supervision of the state ministry of commerce and industry, whose authority has been exercised, in some respects it has been felt, to the harm of the schools.' State supervision has meant uniform regulation, and it is questionable if any uniform scheme of commercial education can safely be attempted over a diverse country. Marcel Bichon, in a recent article in L'Economité, held that it was an error to accept state recognition for schools of commerce, because this had meant state uniformity which he feet was highly undesirable. In an article in an earlier number of L'Economiste' there had been a complaint against the higher commercial schools in France under three heads: first, identical programs for all schools. second, these programs are too pretentious and not well suited to the needs of the schools; and third, the plan of the schools has been little changed since 1881. To these criticisms M. Bichon replied as above noted, and further urged that in France entrance examinations were at present too severe. He recommended for local control of the examinations, saying that as the supervision is now exercised the places available in the higher schools are practically limited, and that there should be a larger number of students in these schools, which can be best brought about by local control of the examinations.

^{*} Consular Report, loc. cst.

^{*}TEEGAN, pp. 114, 115; British Consular Report, pp. 13, 14. All commercial schools recognized by the state are under the control of the inspector general of technical education, who has associated with him a committee including, among others eight district inspectors of commercial education. Ibid., p. 4.

³April 8, 1899.

⁴ March 25, 1890

There are marked differences of opinion as to the character of the various higher commercial schools in France. The British Consular Report on "Commercial Education in France" says that higher commercial training can scarcely be said to exist there at all. In all the schools, so far as this investigation has extended, there are at the most but two years of study, and it would be doubtful if these are of as advanced character as those of the Leipzig Handelshochschule, the Superior Institute at Antwerp, and the London School of Economics and Political Science. In all, there are eleven so-called superior schools of commerce recognized by the state, are governed by the same rules in the matter of examination and technical instruction. These schools are as follows: School of High Commercial studies, Superior Commercial School, and Commercial Institute, in Paris; and the superior commercial

P. 18.

As a result of the peculiar industrial conditions at Lyons the instruction there is made an exception, being given under three heads,

CURRICULUM OF THE SUPERIOR COMMERCIAL SCHOOL AT LYONS.

	Class hours per week		
Subjects	First year	Second year	
I. Subjects Common to all Three Sections		1	
Commercial, shipping, and industrial law Labor, facel, and customs logislation - Political contemy History of commerce French language Modern language	*	31 22 41 1 3	
II. General Commercial and Banking Section			
Commerce and book keeping Handwriting and commercial correspondence ELouanic geography Study of merchand se Second modern language	1* 3 3 3 4	3 3 3	
III. Silk Trade and Industry			
Theory and practice of the special trade in silk goods Book keeping and handwriting Economic geography Technology of textnes Applied mechanics Drawing	r8 3 # ! *	16 2 3 1 1 7	
IV. Trade in Dyeing and Chemical Products			
Theory and practice of the special trade in dyeing products Theory and practice of the special trade in chemical products Book kee, ing and handwriting Economic geography Appied mechanics and physics Drawing	95 3 0 1	#5 9 2 1	

-British Consular Keport, pp. 29-31.

schools at Bordeaux, Havre, Lille, Lyons, Marseilles, Montpellier, Nancy, and Rouen. By general agreement the two institutions under the Paris Chamber of Commerce are credited as higher, and to these M. Bichon adds the schools at Lille, Nancy, and Montpellier. Gaston Cadoux, however, characterizes the nine institutions not under the the Paris Chamber of Commerce as secondary; Mr. Sadler makes no division in the eleven schools, and treats the one at Havre as though in the same class with those at Paris.

The Superior School of Paris has recently moved to new quarters in *l'avenue de la République* by which it has increased its capacity from 160 to 300 students. The School of High Commercial Studies is reported as having approximately 300 students. How successful the French schools have been in shaping the future careers of their students is shown by the accompanying table indicating the occupations of those who have been in attendance at three representative schools.

PROPESSIONS ADOPTED BY FORMER STUDENTS.

Isrofessions (or occupations)	High com mercial studies, Paris	Superior com- mercial school, Paris	Superior com mercia school, Lyons
	-		
Trade	449	1,326	818
Brokers, commission agents, etc -	113	241	54
Industrial occupations	615	1,255	1116
Banking	105	241	90
Insurance	22	42	16
Railway companies' service	9	14	
Various occupations connected with shipping		32	_
Agriculture	2	27	31
Professorship	8	29	10
Sworn translators	2	2	
Directorship, commercial schools, -	-	1	
Government service	295	58	8
Bar and magistracy	7	19	14
Journalism, etc.		15	2
Army	1	4	4
Art	-		à
Book-keeping · · · -	_	_	12
Number of students inquired about -	т,388	3,427	1,545

Consular Report as above, p. 35.

² L' Économiste.

³ Le Monde Moderne.

⁴ Higher Commercial Education, pp. 23 ff.

Sixteen consuls and consular clerks.

^{*}Included under "trade."

Note.—For the High Commercial School the figures date from 1881, for the Superior School, Paris, from 1869; and for the Lyons school from 1872. The students included in the total numbers, but not accounted for in the list of professions, may be classified under the heads of "retired," "performing military service," "lost sight of," "dead." A small proportion have never entered any profession or career. British Consular Report, "Commercial Education in France," p. 34.

Higher commercial schools in France do not enjoy general favor, and are not largely attended. A strong emphasis is placed on classical education, and professional and government positions are overcrowded. It is not too much to say that commercial education will never be popular, perhaps not largely successful, until French society puts a different estimate on various careers, but recent events indicate that France looks to education as one means by which to sustain herself in the competition of modern industrial and commercial society, and to this end considerable attention and support are being given to commercial training.

RECENT COMMERCIAL EDUCATION IN BELGIUM.

Recent changes in Belgian commercial education have been due to two forces—governmental reform and private initiative. In 1893 the Belgian government considered with the Supreme Council of Industry and Commerce, the question of properly prepared persons for its consular service, and out of that conference there came the reorganization of commercial education. Royal decrees were issued in 1896 and 1897, giving new powers to the state universities, and to the Superior Institute of Commerce at Antwerp. These decrees empowered the State universities at Ghent and Liége to grant licencié du degré supérieur en sciences commerciales et consulaires, and added a third year of study to the course of the Superior Institute at Antwerp. Parallel with these governmental changes private organizations established commercial instruction in several of the Belgian cities.

'The total number of students at the various [higher] schools, at present, amounts to over thirteen hundred. The attendance for nine schools in 1896-7, as reported by SADIER, was ten hundred forty-two. Higher Commercial Education, etc. p. 24.

"The social position of trade is rising in France," etc. See SADIFR, p. 27. This question of regard for careers, and its consequences, is buildingly set forth in DESIGIEN'S Anglo Saxon Superiority

British Consular Report, "Commercial Education in Belgium," pp 3, 4.

Three institutions give higher commercial instruction in Belgian The state universities above noted and the Superior Institute of Commerce at Antwerp. The universities are privileged to grant a superior degree in the commercial and consular sciences, and the Superior Institute gives two degrees -- one for its two year course, licencié en sciences commerciales, and the second, the superior degree as above. The first degree is granted at the conclusion of the twoyear course upon a successful examination in the following subjects: general commercial affairs, general and commercial geography, history of commerce and industry, political economy and statistics, commercial and maritime law, international law as it relates to commercial affain, customs regulations in Belgium and foreign countries, commercial products, shipping and maritime construction, and in the following languages: French, Dutch, German, English, and Spanish or Italian. For the degree of the third year other subjects are added to the above list. Regulations for the Antwerp school are similar to those for the higher schools in Paris. The number of students attending in 1898 was 240, of whom 163 were natives and eighty six foreigners."

A third year in a higher commercial school is an innovation. The course for this year in the Antwerp Institute follows:

Companies. — Industrial Enterprises. — Banks: Public funds — Financial aspect of the principal countries. — Different systems of book-keeping.

CONSTITUTIONAL LAW.

History of the Constitution of the principal countries; — principles of the Belgian Constitution; — the liberties recognized by the same.—Legislation, judicial and executive. — Chief points of the English. French, and German constitutional régimes.

ADMINISTRATIVE LAW.

Organization and competence of Administrative Authorities.— Execution of the Law.— Deliberative Authorities.— Administration of Justice.— Armed force.— Public property, land and sea.— Industry, mines, commerce, and laws affecting the same.

COMMERCIAL AND MARITIME LEGISLATION COMPARED.

Merchants' and Commercial Acts. -Transactions under the principal legislative enactments.—Bills of Exchange, inland and foreign-Joint Stock Companies. — Bankruptcies and failures. — Tribunals of Commerce.—Maritime law.

British Consular Report, "Higher Commercial Education in Belgium," pp 3-4

RIGHTS OF THE PROPLE.

Principles. History of the various states, of territory, of the customs of the sea, of rivers and of straits. — Absolute right, relative right of the States. — Obligations of the states during time of peace; diplomatic agents, merchants, treaties. — History and examination of the principal treaties relative to intellectual rights (patents, trade marks, literary and artistic property, etc.). — Material interest (money, fisheries, commerce, and industry, means of communication, railways, postage, telegraphy, telephone).

CONSULAR SERVICE.

Insight into the legislations of the principal commercial countries. — Historical classification and hierarchy. — Nominations, incompatibilities, attributes in Christian and non Christian countries. —Commercial attributes, judicial, notarial functions, civil offices, divers powers.

RIGHTS AND PREROGATIVES OF CONSULS.

Consular regulations.— Differences between States.— Pacific solutions, violent solutions; war; consequences of the declaration of war in the case of belligerents and neutrals; of the trade of the neutrals during war.—Acts; theater and operation of the war.— Conventional relations of the belligerents.

POLITICAL ECONOMY.

Review of the lectures of the first and second years, and completion of the course.—Thorough study of special questions, economical and financial.

INDUSTRIAL AND COMMERCIAL GEOGRAPHY.

Completion of the course of the first year —Industrial geography of Belgium, in all its details. —Economical geography of different countries

INDUSTRIAL STATISTICS.

Of statistics, their ann, use, characters, divisions, etc.—Special study of the statistics of importation, of exportation, of transit, etc.—Movements of the ports.—Warehouse statistics and returns.—River fishing—Special Belgian statistics, and statistics of the principal countries

INDUSTRIAL TECHNOLOGY.

Study of the principal Belgian industries. Raw materials and their production.— Manufactured products, qualities, classification, etc.

Description of manufactured products:-

- 1. Extractive industries, mining industries, quarries, manufacture of coke, gas; manufacture of lime and cement.
 - 2 Metallurgical industries, smelting of iron and steel.

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- 3. Ceramic industries; bricks, tiles, pipes for drainage; ceramic and cement pavements, china and earthenware.
- 4. Glass-making; crystal, plate glass, window glass, looking-glasses, mirrors, etc.
- Chemical industries; manufacture of sulphuric and hydrochloric acids, nitrate of soda, potash, chlorals, white lead, etc.—Paper-making.
- 6. Textile industries; spinning of cotton, wool, flax, hemp, jute, etc.—Manufacture (weaving and preparation) of cotton tissues, wools, linens, etc.—Manufacture of cables, ropes, cordage, etc.
- Industries of construction, foundries, coppersmiths; construction of bridges and iron work; construction of steam engines and steam machinery, locomotives, and plant and rolling stock for railways.
- 8. Alimentary industries; corn trade; manufacture of sugar, beer. alcohol.
- 9. Divers industries; tannery and leather band-making, leather dressing, (clothing industry), hat-making, cloth weaving, boot-making, ready-made clothes, corsets, etc.

TRANSPORT.

(Continuation of the course of ship-building and armaments of the second year.)

Railways.—Rails; stations.—Rolling stock; locomotives, tenders, carriages, goods, vans, and trucks.—Tariffs of the transportation of passengers and goods.—Exploitation of railways by the State, by private companies Steam tram lines.—Transways.

INTERIOR NAVIGATION.

Rivers, canals, material; canal boats, tugs, sailing boats, barges, etc. —Tariffs.

LANGUAGES.

German, Fleinish, English, Spanish, Italian.—Commercial, industrial, financial, and economical reports.—Drafting deeds and documents, civil and commercial.—Conversation.—Study of the principal authors, publishers, contemporary Political Economists.

Russian (lower section for second year students).— Pronunciation, reading, grammar, dictation, exercise, and composition; epistolary and commercial style, exercises, etc.

Russian (higher section in the third year).—Style in general. commercial letters; forms in use.—Translation of leading authors.

Presented by the Director, November 24, 1896.

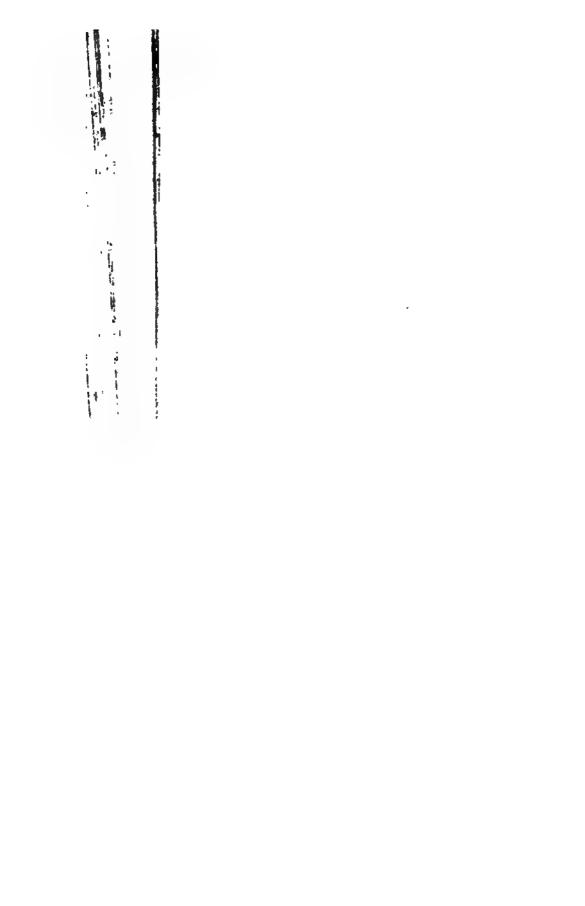
² Translations of Professor Layton, of the Antwerp Superior Institute. Prated in Sadler's Higher Commercial Education, etc., pp. 51, 52.



IV.

OBSTACLES TO THE INAUGURATION OF COMMERCIAL EDUCATION.

"Throughout the country good elementary schools, taking the child to the age of thirteen; then good secondary schools taking him to sixteen, with good classical high schools and commercial high schools, taking him further to eighteen or nineteen; with good technical and special schools for those who require them parallel with secondary and high schools—this is what is to be aimed at. Without system, and concert and thought, it cannot be attained."—MATTHEW ARNOLD, Reign of Queen Victoria, quoted in "Studies in Secondary Education," pp. 12 and 13.



OBSTACLES TO THE INAUGURATION OF COMMERCIAL EDUCATION.

What was given in parts I and II may be regarded as a statement of the needs and ideals of commercial instruction, but in the realization of the ideals there are many hindrances.

SEEMING OPPOSITION TO ESTABLISHED EDUCATION.

First, commercial education is handicapped by its seeming opposition to existing educational schemes. Any argument for the addi tion of a new element must of necessity encounter opposition, for it appears to be an arraignment of that which is established. Those who stand for and are products of the educational régime now obtaining, feel that it must needs be defended at their hands superintendent Dutton has shown that education is the slowest of all forms of social activity in adapting itself to new conditions, that while philanthropic work and measures for convenience and health have rapidly improved, education is "slow, inexcusably slow." President Eliot has gracefully said, that proposals to change the existing order of education can but offend all who are conservative and further, that educators as a class are conservative, for with them it is a common belief that the "subjects in which they themselves were instructed" are "indispensable." As teachers we are all trying to lead others to see the truth as we think we see it." As Professor Patten says, "The new education has been heralded numberless times; in fact, it is always with us, and yet the predicted revolution has not come, and we are still following the traditional lines of education with such slight exceptions, that it would be difficult to enumerate any clearly defined principle which our age has brought forth."3 It is with extreme

^{&#}x27;Di tton, Social Photes of Education, pp. 149, 150

PRILERTON, address at Trenton meeting of Middle States and Maryland Assostation of Schools and Colleges, 1899

Place of University Extension, p 2.

[&]quot;Educational progress has been first the effect of progress, and then the cause of more progress." - WOODWARD, Manual Training, p. 3.

difficulty that a new subject can gain a place in the magic circle (EB) liberal.' In consequence and from the tendency to perpetuate and, education is constantly menaced by the likelihood to "crystallite" Educational progress is not unlike the progress of physical science r of theology. When Copernicus came forward with the heliocopcentic theory of the solar system he was discredited because, if his theory were true, all former teaching was at fault. Witchcraft kept its hold long after it by rights should have disappeared, because should mid craft be acknowledged wrong, then the numbers it had put to death, would be considered as murdered. To break with existing education would be as fatal as it would be unwise. Established education it priceless heritage wrought out by the patient intellectual effort of all the ages. "A great educational tradition is one of the most precion things in the world. The history of education teaches no lesson so frankly as this that reform is always possible, but that sudden terlution is disastrous." Commercial education ought not to be interpreted as antagonistic to existing forms of education, but rather as a means of supplying a new demand of the times, and as such, a supple ment to the educational machinery already in operation, which will make education a more effective social force

LACK OF ORGANIZATION, BUILDINGS, EQUIPMENT, ETC.

The second difficulty which this branch of education encounters, a lack of curricula, organization, buildings, etc., which have to do with the material equipment.

AMERICAN AND EUROPEAN METHODS CONTRASTED.

Under American conditions educational progress is necessarily slow Each community must make its own provision and each community must, therefore, be led to see the necessity of new forms or improved methods of instruction, and to pay the price of the sacrifice to secure them

Under European conditions, a minister of education by a proclamation can often effect changes and get favorable results directly, but

"It was more than a hundred years after the widespread revival of Greek to Europe before that language was established at Paris and Oxford as a regular out statuent in the academic curriculum."— Educational Reform, p. 91.

SADLER, Secondary Education and Practical Life, p. 18.

⁴ An able analysis, expository and critical, of the German method of coeff ⁴ given in Russelle's concording chapter, "Ments and Defects of German Section Education," German Higher Schools, pp. 406-22.

in America we realize progress by more tedious steps. In education as in politics, however, the very slowness of our movements is a protection against hasty or ill-advised action. Undoubtedly there are gains in certain directions from strong central control to those peoples that have it. Says the English special commissioner Mr. Sadler:

Referring once more to Germany, and especially to Prussia, your deputation cannot conceal their sense of the advantage, whatever may be the ultimate drawbacks, of a centralized bureaucratic administration, which, taking a careful survey of the educational and industrial needs, places the schools here and there as circumstances require, brings them into mutual relation, supplies ample means, and effectively assists without loss of time the industrial advance. Something may be lost of "freedom, variety, and elasticity," and that loss may ultimately be serious in its effects upon individual initiative, upon which we as a nation so confidently rely. Which is the better policy the future alone can determine.

Gascon Cadoux in his article, "L'Enseignement Commercial" points out what he regards great advantages of decentralization in educational administration, citing the notable progress of commercial education in Austria-Hungary with regulation largely local, the attention to local needs, etc. From this he recommends a larger local control of schools of commerce in France."

POSSIBLE METHODS OF INAUGURATING COMMERCIAL EDUCATION.

There are a variety of ways by which commercial education might be organized and established. First, by private initiative, a method made familiar by the history of the academy of a generation ago. Such, indeed, is the manner by which many of the famous schools of commerce in Europe have been built up, but in many cases as, for example, the Superior School at Paris and the Merchants' School at Crefeld, this form of control has passed into the next, in which the support of commercial schools is in part from boards of trade and other merchant bodies and in part from public funds. This is at present the most common method of organizing and supporting the European schools of commerce. In the third instance, these schools might be established by the community as a part of the system of public education, and this, indeed, has already been done in many American cities,

Problems in Prussian Secondary Education for boys, p. 170

Le Monde Moderne, August, 1899. See also letter of Marcel Bishon in L'Economiste, April 8, 1899. For a further statement of the advantages of local control in education see Report of Royal Commission on Secondary Education, Vo. 1, p. 326

It is believed that establishing commercial instruction as a branch of public education has not thus far been entirely satisfactory in this country, and this whether regard be had for the existing independent business schools, or for the courses that have been inaugurated in established public high schools. Superintendent Maxwell has this to say of the operation of the two-year scheme for some years in vogue in Brooklyn, and of the four year scheme recently instituted in the high schools of New York City

The two-year commercial courses in the Brooklyn high schools should be abolished, and probably the four-year courses in the Manhattan high schools recently established. A commercial high school should be established in Manhattan, and a commercial high school should be established in Brooklyn. My experience with the work of the two-year commercial courses in the Brooklyn high schools leads me reluctantly to the conclusion that they are not nearly as effective as they should be. They are established in schools in which the largest share of attention is given to the classical and mathematical courses. These courses attract the more gifted pupils and the stronger teachers. All the more poorly equipped pupils gravitate to the commercial courses. It will be interesting to observe the development of the fouryear commercial courses in the Manhattan high schools. However they may succeed, I am quite sure that two-year commercial courses placed side by side with four-year literary and scientific courses are simply a colossal blunder. Indeed, such a course was abolished fifteen years ago in the College of the City of New York, because it proved an utter failure. What we need are commercial high schools that shall be wholly devoted to preparation for commercial work. The work of these schoolsshould be based on mercantile experience, and should meet the demands of the times."

Superintendent Maxwell goes to the heart of the matter in the statement that we need independent schools of commerce. The experience of Brooklyn and New York with courses in classical and general high schools is likely to be the experience of Philadelphia. In his annual report for 1898 9, the Philadelphia superintendent of schools gives utterance to the statement that it is theoretically wrong to attempt permanently this technical work in any established school that is distinctively classical or literary.

PROFESSOR JAMES, Commercial Education in United States, Monograph for Paul Exposition, 1900, Proof Sheets

² Address on Commercial Education, pp 9, 10.

ADVANTAGES OF PRIVATE ESTABLISHMENT FOR EXPERIMENTATION

In the experimentation that must precede the establishment of separate schools of commerce that shall be assured of the largest success, private institutions on an independent basis would seem to have certain advantages. As pointed out by Professor James, the routine and formalism of the public schools are against the necessary experimenting to work out satisfactorily the problems of organization and curricula.' There can be little doubt but that there would be advantages in the establishment of a commercial school with a liberal support from some individual or corporation in which the experiments might be made and from which suggestions could be given to public institutions. Such was the plan on which the Chicago Manual-Training School was projected. The Commercial Club of Chicago subscribed stock, Dr. Belfield was selected as director, and sent abroad as an investigator, and the intelligent conception of and expression concerning manual training that came from Chicago have been of great service to this phase of education in its formative period." In the discussion on commercial education before the International Congress on Technical Education (1897) M. Jacques Siegfreed declared that order would come out of the confusion then in England by the chamber of commerce establishing one school of each type: elementary, secondary, and higher, to serve as models. Repeated favorable reference to this suggestion showed that it was thought not wide of the mark.3 There is less likelihood of chambers of commerce undertaking such a plan as is above suggested in this country, than there would be in Europe, and our dependence must be largely upon public education to solve this problem. A service of very great value would be rendered if chambers of commerce or boards of public education would send alert young men who are trained observers to European centers of com mercial education and commercial activity, that they might broaden our notions of the needs and possibilities of business training. Such was the policy of the American Bankers' Association in sending Professo

^{*} Education of Business Men in Europe, pp. xvi, xvii.

^{*}Industrial Education, Eighth Annual Report of Commissioner of I abor, pp 32, 33-

Proceedings of International Congress, pp. 201, 203, 204.

^{*}MR. MATHER, in his report on Technical Education in the United States to the Second Royal Commission on Technical Education, said that he found in this country a predisposition to depend on public education.

James abroad in 1892 The report of that investigation was no slight gain to the cause of practical education in this country, but we need many such reports on the general and special phases of the question, and, above all, we need men who shall have the knowledge and the enthusiasm that will come from personal contact with trade condition and established business schools

NEED OF INTERESTING MERCHANTS AND TRADESMEN.

As dependence with us must be largely upon public institutions, it would seem the part of wisdom to interest in these, to select for their boards of control, men who are active in trade and industry. Foreign experience here is of value. The Merchant Guilds in Germany and other European cities have not only supported schools of commerce at members of the community by formulating public sentiment, but they have contributed directly to the maintenance of these schools. Frequently the expense of conducting the schools, above the returns from fees, is divided between public grants and the private bequests of merchants or merchant organizations. But most important, perhaps, of the influences of the merchant class upon schools of commerce, have been their part in the formation of courses of study, and in determining the methods of teaching Indeed, when the business community and the educational administration shall be brought closer together in formulating the policies of schools of commerce, the difficulties incident from lack of public interest on the one side, and from the too academic character of the instruction on the other, will be largely removed. One of the most hopeful signs of the times was the Guildhall conference recently held in London. From the academic side, we have the following recommendations from one American city for utilizing the business community in establishing and administering commercial education:

- "I. Commercial high schools should be regularly inspected by members of the Chamber appointed for that purpose. The inspectors should periodically report upon the efficiency of the work.
- "II. The course of study should be at least once a year submitted to a Committee of mercantile experts appointed by the Chamber of Commerce, so that it may always be suited to the necessities of commerce.
- "III. The Chamber of Commerce might appoint two or more of its members to assist in the examination for the licensing of teachers to

teach in the Commercial High School. Particularly is this necessary in case of those who are to teach technical mercantile branches."

SAFETY IN DEFERRING TO PRACTICAL MEN.

It is comforting to feel that business men may be deferred to in matters of educational policy without danger. In the preparation of a paper to present to the National Educational Association in 1807. Charles H. Thurber sent letters "to a large number of representative business-men" in which were asked a series of definite questions bearing on the general and special aspects of the subject." The first of these was: "Should a business-man have a college education. or is a high-school education sufficient?" To this question there was the practically unanimous answer that a high-school education is ample. The second question was whether the greatest value of education is in the amount of knowledge gained, or in its discipline and control of the mind. To this there was a practical agreement that discipling of the mind is the most important function of the school. The third question was, "At what age is it well for persons to enter upon a business career?" and to this the answers were largely in favor of beginning under the age of twenty. Latin was thought to be of little practical value and Greek of none at all German and French were recognized as of slight value, except in special cases, and between the two, German was thought to have a greater value than French Mathematics were placed high by all who answered these questions. Chemistry and biology were thought to be of special value only in definite lines of activity. That business-men comprehend the more liberal aspects of education, is shown by the answers to the inquiry concerning the value of histories and language. In both cases these were placed high, there being, we are told, a "surprising unanimity," in the answer to questions touching these subjects. Those who answered the requests favored political economy in the high school and opposed psychology, except that there was some favor shown to ethics. Stenography, type-writing, and book-keeping were generally recommended. To the final question in the inquiry, "Do you favor the establishment of so-called commercial high schools?" there was a practical unanimous affirmative. These replies were opposed to an effort to teach actual business transactions in school. There is a substantial correspondence

SUPERINTENDENT MAXWELL, Commercial Education, pp. 10, 11.

^{*}Proceedings of the National Educational Assertation, 1887, pp. 808-18.

between the recommendations of business-men for courses of study and the best judgment which expert educators have given for similar courses. This being true, it is a reasonable policy to defer in the establishing of commercial education to the recommendations of businessmen. Indeed, intelligent initiative is often shown by business-men in expressions such as. "If our commercial men are to be better educated, if their standing in the world is to be worth anything, they must add to their best possible practical training, special, careful, and scientific supplemental training," by a representative body of German business-men, or by a more recent resolution of the New York Chamber of Commerce

WHEREAS, The modern conditions of commerce and industry require wider knowledge and higher education on the part of business-men,

WHEREAS, The present educational facilities offered to business-men are inadequate and fail to equip them for competition in the world's commerce

Resolved. That the Chamber of Commerce of the State of New York earnestly favors the establishment and development of sounder commercial education, both in secondary schools and higher institutions of learning.

ADVANTAGES OF INDEPENDENT SCHOOLS OF COMMERCE.

There are many arguments which present themselves for the estab lishment of independent schools of commerce. Special schools are needed to give definite purpose to educational effort. In the earlier pages of this discussion it was urged that education needs to be practical, but in this connection it may be argued that previous education has been, and existing education is, too general, too indefinite, and that a wider appeal and a larger measure of success will attend labors for secondary and higher education if these labors be directed toward specific ends. The policy of a special school would not be without gain even on the narrower basis. Says Mr Sadler: "Nevertheless, on the purely intellectual side of school work, there is all the difference in the world between knowing what you aim at and having no fixed standard or purpose. It will not be disputed that there is a range of knowledge which a 'well-educated man' ought to possess, that the range will alter from age to age according to the changing circumstances of the time, and that our conception of what a man ought to know naturally varies with his profession or calling, and with the intellectual standard of the society in which he ought to move."2

[&]quot;Petition of Thirty six Saxon Commercial Societies to their Government,' in SEARCII, Technical Education from a Business Standpoint, p. 8

[·] Problems in Prussian Secondary Education, pp 53, 54.

Again, distinct schools are necessary for the inauguration of any successful scheme of commercial education because of the unconscious or subconscious elements which are often the most important factors in an educational institution. The indefinable something that we call the atmosphere of the school, the tone which pervades the place where school is held, this alone is sufficient to convert any scheme of education into success or failure. As suggested by Dr. Wormell, other voices speak in established institutions, and they speak to the harm of any new form of education.' It is impossible to convert existing schools into schools of commerce, and out of regard for the highest good of those schools it may be undesirable to make the effort.

Commercial education can never be said to have had a proper trial until it is treated as manual training has been treated. Manual training, as a rule, was not a success except as it was placed in an independent institution. While courses involving manual instruction were given as side issues, or as termed in a recent Educational Review editorial, "side shows," in established high schools, such courses were a disappointment, and only since this form of education has had an independent basis upon which to rest has it given satisfactory results

In order to determine what the manual-training experience has to teach on the question of distinct schools, letters have been addressed to men who have been identified with this phase of education. Representative replies are easily classified into three groups (1) independent schools of commerce, at least of the secondary grade, are not necessary and are undestrable; (2) whether there should be a separate school for commercial instruction depends upon local conditions, and no rule can be advanced; and (3) it is beyond question that wherever possible, independent business schools should be resorted to. So far as the high school is concerned the first position is a fair deduction from the report of the Committee of Ten: "That every subject which is taught at all in the secondary school should be taught in the same way and to the same extent to every pupil so long as he pursues it, no matter what the probable destination of the pupil may be, or at what point his education is to cease." Such is the tenor of President Eliot's recent declarations, and in a letter which he has been good enough to furnish, he puts himself on record to the same effect. Dr C Hanford Henderson, who was some years prominently identified

Proceedings of the International Congress on Technical Education, pp. 187, 188.

Report of the Committee of Ten, p. 17.

with manual training, says. "I do not a training schools need a separate establish such separation was doubtless necessary in ment and place upon it the emphasis wh moment be undesirable." From a prob scheme of secondary schools of commerce study, the mathematics, and the science of as superior, Dr. Henderson says: "I shot opposed to the establishment of separate The report of the Committee of Ten has dom, but the declaration that all pupils t study shall be treated similarly cannot are limits of various sorts to educational pot pedagogy not to reckon with these. To lit lack of ability, etc., there should be added of material resources, and sometimes a fu matter of time." For the most of those with who do not, many subjects of study in the same as English, modern languages, scien ics. Shall these be taught without regard to in school, or his destination after leaving? we have any sympathy or regard for the boy

Second, Director H. H. Belfield, of the School, believes that the attitude of the fact toward a department of commerce and the of education as shown by the number of the decide the question of a distinct school, What success would manual training have existing schools? Dr. Belfield says: "I thin entirely on the feeling of the established comer. In the case of manual training, vo of teachers were inimical to it. They de intruder, which they took every opportunit manual training would have been almost, if but for the establishment of distinct man there is, as you well know, a notable excep ment. One of the best manual-training s is the Scott Manual Training School of Te

ROSENKRANZ, Philosophy of Education, Part I,

as a department of the long-established Toledo High School. But in this case the teachers of the high school were in sympathy with the movement." For purposes of experimentation and to determine the demand for this sort of education, Dr. Belfield suggests the establishment and immediate continuance of commercial courses in existing high schools, unless it be found that the animosity of high-school teachers embarrasses the experiment and hinders the free election by students.

Other considerations, of course, enter into this question of the mixed character of high schools. In small cities separate schools are not possible, and in most large cities one central high school of commerce means that its students would need to travel great distances at an expenditure of time and money. Again, with schools in which several lines of work are being given, it is possible to put off the electing for a course, ofttimes for a career, a year or two later than the time of entrance into the high school. Such a decision should be left as late as practicable.' Under this head Director C. M. Woodward, of St Louis, has to say: "I will add to the above that in my opinion this matter of differentiating secondary education according to whims and choices which are ordinarily without sufficient reason, is in danger of being carried too far. I am far from admitting that every boy who enters a manual-training school is predestined to be either a mechanic or an engineer, just as I should be unwilling to admit that every graduate of your commercial school would be a business-man. The age of fourteen years, more or less, when boys must enter upon secondary education, is too early to decide the great question of occupation or career in life. I insist that the question shall be left open at least two years more, and that during these two years literature, mechanical arts and commercial training shall enter into a boy's education in such a way as to leave all the doors open, and, above all, leave the boy free to make the best choice when he is sufficiently developed to do so" Distinct schools do not preclude a boy's changing after he has entered upon a course of study. It has been the custom in Philadelphia to freely transfer boys from a high school of one sort to that of another if they wish it; so it does not follow that a boy who elects a course in

^{&#}x27;Ambercombie, before the Harvard Teachers' Association, March 4, 1890, cited Mr Edward Thring, that students in the choice of a career should have as many avenues as possible open to them, and further that the old education does not bring out the many-sided character of modern life. Reported in New England Journal of Education.

any high school takes a through train to a particular terminus; there are frequent stops, and there are possibilities of "switching off." Indeed, on the other side, as a protection to the course in commerce in the Central High School, we have had to impose the rule that no boy can enter it from the regular course after the first year, so that under existing conditions, and with mixed courses of study in one school, it is easier for a boy to transfer to a manual-training school than it is to the commercial course of the school in which he already is.

Third, the larger number of those who are writing and speaking for commercial education in this country, feel that we must look to distinct schools. Magazine articles, published addresses, and reports have been repeatedly referred to in these pages, and a collected list of some of the most important of them is appended in a bibliographical note This third position is a natural outgrowth of the second. Those who hold for mixed schools do so on the supposition that harmonious relations will be sustained, and fair treatment shown; but this, after all, can hardly be expected. The two forms of education are dissimilar, and unless they can be organized as separate schools in one institution, they should be in separate institutions. The theory is thus stated by Dr. Belfield. "I believe it to be a general principle that success in any particular line of study is best assured in an institution devoted to that particular work. We do not combine our schools of law and medicine. I think probably the very best work in the line in which you are particularly interested would be done in a distinct school."

Self-interest and intensity of belief are reasonably sure of making business education and classical education uncomfortable neighbors. In writing this I want to bear testimony to most kindly personal treatment from my colleagues at the Central High School, but many of them do not believe in the project with which I am identified, and they do not wish to see the experiment succeed, at least not as a rival department of a school that they rightly feel stands for education along radically different lines A man on our faculty who does not sympathize with commercial education said recently: "This new department will prove a brilliant success or a dismal failure; in the former event it will absorb the high school, in the latter the high school will absorb it." From the situation in which commercial education is placed in literary and classical schools, there is but one logical conclusion, independent schools are so desirable that they seem necessary.

THE SUPPORT OF THE BUSINESS COMMUNITY.

To create their distinctive educational atmosphere, schools of commerce need to have the confidence and the support of the business community. The superintendent of schools at our greatest business center made an effort recently to determine how largely employers of labor turned to education as a means of fitting their employés. A series of inquiries was sent to selected business houses in New York, covering such points as: Is any standard of educational equipment insisted upon; what is the relative value of American us. foreign trained youths for commercial work; to what extent is the public school a preparation for mercantile life; and, is any effort made to get those already engaged to continue their education by attendance upon night schools, or through other means? On the basis of the thirtytwo replies received (which Superintendent Maxwell feels is insufficient data) the following conclusions are reached: (1) Merchants and manufacturers have done little for improving education by insisting that those they employ shall have attained a certain educational standard; (2) they have done next to nothing for higher education by requiring that those who take places of trust and responsibility shall have had the training of the college or the secondary school; (3) they have not done their whole duty by encouraging those already in their employ to continue their education by study before or after business hours."

While the information on which the above conclusions are based is slight, I believe it is representative, and that these conclusions hold for business communities in general in this country. A great obstacle in the establishment of business schools of a proper character is the inertness of the business community itself, and the disposition on the part of business men to take boys into their offices in the lowest positions and promote them with age and experience. Such a course is at once unfair to the boy, and is contrary to the tendencies of the age, that require in all lines of work, more information and better trained minds than were once thought necessary. This inertness of the business community must be overcome. Business men must be enlisted in the project to give a training that will equip workers, and then they should make it a rule to give preference to those who have complied with a higher standard of preparation. Such is already the policy of the London Chamber of Commerce

^{*} MAXWELL, Address, Commercial Education, pp. 2-5

BARRIER BEIWEEN THE ACADEMIC AND THE PRACTICAL.

A further obstacle to the successful establishment of commercial education is the seeming barrier between the academic and the practical. Business men on the one hand pride themselves on their ability to get on without education, thinking success to be a matter of smartness rather than of training, and not infrequently do we find men contrasting their business success with their limited education, and boasting that education is not an essential for success. Over against this is the cordial spurning of the practical that not infrequently characterizes educators. An instrument of education that has utility is felt by them to be contaminated. Men in school and college are not unlike that Cambridge professor of mathematics, who concluded a brilliant demonstration in his chosen subject with the statement: "Gentlemen, the most beautiful thing about that proof is, that it can never be of any practical value to any living being." As schoolmen we are to prone to feel that if subject of study has practical value it is besmirched. The problem of making our education practical, and that without too great sacrifice of the ends of training, is not of easy solution, vet it is this problem with which commercial education is confronted. The only hope of success is in having men of affairs and educators come to a better agreement as to what education is, and how subjects having a practical value can be utilized in obtaining it.

SCHOOLS OF COMMERCE TO BE UP-TO-DATE.

Schools of commerce must by some means be given the flavor and spirit of business life. This cannot come from converting the school into the counting-house. Such action would destroy the school; our prime end must be ever educational, but there is possible an education that comes from an up-to-date knowledge of business activity and business conditions. As President Eliot says a school of commerce "should possess the means of keeping its knowledge of commercial conditions absolutely fresh. No salted provisions or canned goods would be useful in its larder. Its teachers would have to live at a commercial center, and breathe every day a wholesome commercial atmosphere. Boards of trade would be better supervisors for such a school than any bureau of education. Men actively engaged in foreign commerce ought to oversee it."

^{&#}x27;Address before International Commercial Congress, Philadelphia, published in Proceedings of Congress, also in Educational Review, December, 1899

The means of keeping a business school in touch with actual busi ness conditions are varied. Business-men should appear in it for occasional addresses, or for special courses of instruction. Regular instructors should, if possible, be men who have had business experience, and certainly men who have strong business leanings. The teachers in a commercial school should live in a world of real things and not of theories. Representative journals of trade and industry should be kept on file, and the freshest books on the work in hand placed before the students, but by a system of clippings and filing the information should be kept in advance of the books. Students can be stimulated to gather and coördinate knowledge on special subjects of investigation, both for the knowledge itself and for the training that comes from doing this sort of work. But in part the work of the school of commerce should be extra-mural. Systematic study through field visitation of various branches of business, trade, and industry can be made, covering the material available in the locality of the school Much work in the school is necessary to make field work definite and profitable, but if suitable preparation be made in advance and the proper reports be required following visits, these can at once be the means of education and of bringing the school into vital rela tions with the business world. Such is the reported experience of schools in Germany, France, and Belgium; and, in the limited degree in which visits have been organized, such is our experience in Phila delphia.

NEW SORT OF SCIENCE EQUIPMENT.

A new type of science is to be given in schools of commerce. Animal, vegetable, and mineral products are to be studied as the raw materials of commerce and to this end a special, though inexpensive, laboratory equipment is needed; also a collection of raw materials and of materials in the various stages of manufacture. Such a collection can be readily obtained in any industrial center. No school can bear a semblance to a school of commerce unless there is in it an experimental laboratory attached to a museum of trade products, for of all the work in such a school, science must be most pronouncedly a study of things. Prevailing notions of material and equipment for science study are dangerous if they govern in the equipment of schools of commerce; we need a different sort of material and different facilities for handling it.

PALATIAL BUILDINGS AND EXPENSIVE EQUIPMENT NOT NECESSAR

It is a mistake to feel that palatial buildings, costly apparatus, liberal endowment are a requisite to inaugurate commercial educat Under this head again German practice has a significant lesson. V them technical schools of all sorts are, in the majority of cases buildings simple and unpretentious, and their material equipmen inexpensive. Mr. Search has shown that often an old mill or al doned castle is fitted up and in such quarters the German sch maugurate their work and demonstrate their worth." For example, Leipzig Handelshochschule, which is the most promising comme school experiment in recent years, began its work without build and with no independent teaching staff. The aula of Leipzig Uni sity is utilized and the teachers come from the Modern School Commerce, and Leipzig University. For their extra hours the inst tors receive fees, but the whole scheme of the Leipzig school launched on two thousand dollars (twelve hundred fifty guaranteed the Leipzig Chamber of Commerce and seven hundred fifty by Saxon government). In addition there was a slight return from nominal fee of fifty dollars per year from each student. To us almost beyond belief that a school of so genuine worth, and which less than two years has proven to be of so profound influence, could established on what we would think insufficient to make the first s toward such a project. Yet we are reminded that there are exceptito our usual practice, one of the most striking of which is Philadelphia Textile School. Mr. Theodore C. Search, with a f belief in the idea for which this school stands, began to teach a gre of men in the evening and practically unaided created a most use institution. For educational work of all kinds in this country we no money, but we also need a wise oversight and judicious expenditure what is given.

Technical education in this country has felt that costly equipment is necessary to produce results. Manual-training schools with us his much more elaborate apparatus than have similar institutions on to other side.* Foreign visitors have been much impressed with the side of the sid

^{*} Technical Education from a Business Standpoint, p. 17.

²⁴ The collossal mechanical appliances for testing the strength of materials of to be seen in the Chicago, St. Louis, Toledo, and Philadelphia schools) dwarf is insignificance the relatively meager equipments of the foreign schools of this class." Industrial Education. Eighth Annual Report of Commissioner of Labor, p. 18.

paraphernalia of our business colleges, and of some of the business college high schools. Mr. Bernard de Bear, in a paper before the International Congress on Technical Education in 1897, gave this trenchant criticism of our methods for business education: "If I might be permitted to crystallize into one sentence my criticism of American business training methods, I should say there were much to gratify the eye and to make an attractive display, but the great outlay involved in all this ornamentation and lavish expenditure on mahogany, plate glass, and gilding prevented the employment of a staff of teachers adequate to the purpose and able to carry out what is so desirable, but what in America is found to be but a mere figure of speech, namely, strictly individual instruction."

SUPREME NEED IS MEN AS LEADERS AND FEACHERS

More important than money, commercial education needs menmen of commanding power as organizers and leaders - men who can create the proper sentiment in matters educational. Commercial education asks that those who serve it shall stand in a middle position between the business community and academic interests. It is the lack of large-minded, well-balanced, agressive leadership and of equipped and experienced teachers that offers the most insuperable obstacle to business education. Of a truth we can say of this country, as Mr. J. J. Findlay some years ago said of England, there is not a sufficient supply of competent teachers, and we can say with equal truth it is impossible to produce results without them." When the late Professor Wolfrum from the Commercial School at Leipzig was questioned as to how Germany got her teachers for commercial schools, he answered: "We have to create them ourselves, and it has taken fifty years to do it." 1 It has been felt that one of the most useful services that the higher schools of commerce in London, Paris, Antwerp, and Leipzig, can render, is to train men to carry the branch of instruction for which they stand to other schools. While English and continental teachers are availing themselves of the training of higher commercial schools in Europe, Americans are doing little or nothing to the same end. Business education should never become a part of our system of public

Account of proceedings in Report of the United States Commissioner of Education, 1897-8, p. 330, Advance Sheets.

^{*}JAMES, Education of Business Men in Europe, p. 215.

^{1 /}bid., p. 217.

instruction unless it be liberally planned. Our horizon must be broader than the mere technique or detail of business; we must avoid the routine of the business college on the one hand and the monotony of academic formalism on the other. Whence shall come the virtue to give old knowledge new utility and new attraction? I hazard that it will not proceed out of ourselves. Our educational Moses must be one who has stood on other ground than his native heath; he needs to travel, particularly to observe and study other systems of education. Every teacher, but more especially one who is to have committed to his hand an educational experiment, should have confidence in and enthusiasm for his work.

The rdeal preparation for a teacher of commercial branches would be, first, a broad training in English literature, history, modern languages, science, and economics, to which there should be added a theoretical knowledge of business transactions. After this there should follow practical experience in a business house, travel, and observation. This standard may be too high; the professors in commercial schools in Europe are mainly men who have not had business experience, though they have strong business instincts. First of all, teachers in commercial schools are to live in a commercial atmosphere, which in itself is a preparation for their technical work. In attempting to solve the difficulties attendant upon lack of teachers, let us not make the mistake of feeling that the man who has had business experience is thereby qualified to teach even technical business subjects. It does not hold for manual training that a carpenter is fitted to give instruction in wood-carving, or that a blacksmith is a proper person to teach iron and metal work. Manual training does not attempt to produce craftsmen, neither should commercial education seek to turn out finished business men. What are termed "teaching gifts" are funda mental as a preparation, and to these there must needs be added academic preparation first of all, and then, if possible, practical

The really essential matter in education is the teacher's love for his work and sympathy with his pupils. This it is which awakens life and power in their minds. Schemes of study cannot do this; curriculum and method cannot do it; the most perfect method, the finest and most inspiring subject matter, are dead things in them selves. Still less can state supervision or control accomplish it. It is the teacher inspired by his work who knows how to awaken in the human mind the innate desire for whatsoever is true and good and fair. Freedom, therefore, is the breath of life of the school. Without it, neither teaching nor learning can prosper."—Professor Paulsen, quoted, Sadler, Problems in Prussian Secondary Education for Boys, p. 3

experience in business work. Here, as elsewhere, it may be affirmed, "the primary condition of success lies in the living personality of the teacher, and in his speaking out of the fullness of his heart."

In all branches of education the prime requisite is this "personality of the teacher. Without this no mechanical aids avail. Method is indeed necessary; well-thought-out curricula are an advantage; the testing and comparison of results an indispensable help. But all these things are dead in themselves. The thing that alone breathes life into them all is—the teacher, on fire with a love of his work, full of communicable purpose and clear as to the laws of duty. The only living force in education is a moral force, informing with power not its own, the knowledge which else is dead."

SCHOOLS OF COMMERCE SHOULD BE GIVEN RECOGNITION.

It would seem clear from European experience with schools of commerce, that they will not have any large measure of success unless given recognition with other forms of training of similar grade. The Superior School at Paris, established in 1820, was for more than sixty years an experiment of which the outcome was in doubt. In this period it was the strong leadership, with the personal sacrifice and devotion of the men who were directors, and the support of the Paris Chamber of Commerce, that kept the school in operation. After many years of fostering of this and other schools, and with seeming slight success, M. Jacques Siegfreed undertook an examination to determine the condition of schools of commerce in France, and the reasons therefor. He found that the total enrollment was less than 1,000 pupils, and upon examination was led to the conclusion that the superior values attached to the diplomas of other schools, was the chief cause of small attendance upon and slight interest in schools of commerce. M. Siegfreed urged for a more complete separation of commercial and other forms of instruction, and for the equalizing of the privileges which were attached to training in different lines.3 By Act of 1889, the French extended to those who had the

^{*} Curricula and Programmes of Work for Higher Schools of Prussia, p. 10.

SADLER, Problems in Prussian Secondary Education for Boys, p. 165.

^{**}ISHOENHOF, Industrial Education in France, pp. 82-6. See statement of the effects of the extension from freedom of two years' mutary service to those who held the certificates of the Mercantile School at Chemnitz, upon its attendance (FFLKIN, Technical Education in a Saxon Town, pp. 14, 15). Also, "Commercial High School at Leipzig," British Consular Report, p. 4.

certificate of the higher schools of commerce exemption from two years of military service, as was done with the certificates of other higher schools; other privileges have been extended by various departments and bureaus of the French government, among them eligibility to compete for consular clerkships, for junior clerkships in the ministry of commerce and industry, and for positions in the customs department, students may also be admitted to competition for places in the commercial section of the colonial school. The students of the Superior School are given advantages in the competitive examinations for clerkships in the central colonial offices, also for places in the customs.

After sixty years of experience in France, it is felt that commercial training needs equality of recognition, yet the first proposal of an American University is to the effect that those who come with a high school education, and pursue a four years' course of study, shall receive a certificate, while others with a similar preliminary training, and for work extending over the same time in the university, shall receive a degree: "I propose that there be established at Columbia University under the charge of the college faculty, a collegiate course in commerce of four years' duration, open to students of the grade of high school graduates; that this course, for the time being, shall lead to a certificate but not to a degree; that it shall be supplemented by graduate courses which shall carry the instruction in commerce to any point that may be desired."

SUMMARY.

To summarize, commercial education, soundly conceived, and wisely inaugurated, is not to supplant, wholly or in part, educational machinery now in operation; rather its aim is to interest a new element in our communities in schools of secondary and higher grades. The success of schools of commerce will depend largely on their ability to get and hold the favorable regard of business-men. It is further believed that the largest measure of success is possible for these schools only with their establishment with faculties and equipment for their own special work—their only right to be, is that their instruction shall be distinctive. Business schools of any sort will from the first be under a

^{1&}quot;Commercial Education in France," Diplomatic and Consular Reports of the British Foreign Office, p. 14; and Commercial Instruction Organized by the Paru Chamber of Commerce, pp. 8, 9.

² Address by the President of Columbia University to the New York Chamber of Commerce, published in Repart of Special Committee on Commercial Education, p 5

disability unless the work have a stable academic basis and be recognized as equivalent to other educational schemes of similar grade. Finally, the present crying need is not costly equipment, but men with a genuine enthusiasm born of knowledge and experience along the lines of their work. The obstacles are many, and they will be removed with difficulty; but greatest of these is lack of men. With men properly equipped and properly disposed, commercial education can demonstrate its academic worth and sustain itself as a means of training; it will show its practical value and win the favor of its proper constituency; it will gain its establishment and become a permanent adjunct to our system of instruction.

One who has been identified at all with business training can but feel the danger of its estimating results by a quantitative rather than a qualitative standard. Let us remember that "the desire to be extensively useful does not necessarily coincide with the faculty of being educationally first-rate." At the present stage of commercial education we need to have a care for educational quality as well as mere numbers of students. If we solve the academic problem and properly interest the business community the question of students will take care of itself.

SADLER, Problems, etc., p. 98.





V.

SECONDARY SCHOOL OF COMMERCE IN PHILADELPHIA.

"Philadelphia is especially fitted for such a school by reason of its great manufactories and institutions where every variety of industry may be observed. Here is the most complete commercial museum in the country, in which the varied products of the world may be seen and studied. Here is the Bourse, where the laws and methods of exchange can be observed in actual operation. Here is the great industrial department of the Pennsylvania Museum and School of Industrial Art, in which can be seen the processes by which the raw material is changed into the most beautiful fabrics. All these institutions and others can be used as 'model schools,' or 'schools of observation,' in which can be supplemented and illustrated the instruction of the class room."—EDWARD BROOKS, Superintendent of Schools, Repost 1898-9, pp. 45, 46.



SECONDARY SCHOOL OF COMMERCE IN PHILA-DELPHIA.

Inquiries have been so numerous from various parts of the country for an account of the School of Commerce work of the Central High School, that a brief statement for it is here given. Professor James, in his monograph, Commercial Education in the United States, prepared for the forthcoming Paris Exposition, after reviewing the commercial high-school experiments in several American cities, says that the proper standard of secondary commercial training has probably been more nearly approximated in Philadelphia than in any other place in the country. He gives an account of the establishment of the school, prints its course of study, and predicts that it will grow into a separate institution that will parallel the success of the Manual Training High Schools of the city."

It would be difficult to separate this work from the influence of the community in its inauguration. Philadelphia is, and has ever been, an industrial and commercial city, a fact that has not been without influence on all her education. The success and popularity of manual training is but one of many evidences of this truth. Here have developed among other institutions, Franklin Institute, Girard College, Spring Garden Institute, Wagner Institute, The Williamson School of Mechanical Trades, The Apprentices School of the Masters' Building Exchange, the Pennsylvania Museum and School of Industrial Art with its Textile School, and Drexel Institute. The same spirit that led to a recent gift by a prominent Philadelphian, for a College of Commerce at the University of Vermont, led, nearly twenty years ago, to an endowment for the best known of the higher schools that give commercial instruction in the United States, The Wharton School of Finance and Economy, at the University of Pennsylvania. A commercial course was inaugurated some years since in the Girls' High School of Philadelphia. This course from its inception, enjoyed a good deal of popularity, and its enrollment has taken a fair share of the

^{*} Proof sheets of monograph.

high-school students. The report of the Philadelphia Superintendent of Schools for 1892-3, first made mention of a Commercial High School for Boys. The subject was discussed by the superintendent in the following years, in 1896 a definite proposal being made for such a school. In the meantime the Educational Club had invited Professor James to read a paper on the subject of a High School of Commerce, and the question had been quite generally discussed in the public press. A special committee was appointed by the Board of Education to organize a school of commerce, but the necessary appropriation was refused by city councils, and for the time being, the matter was dropped. After Mr. Samuel B. Huey became president of the Board, he revived interest in the project, and in his Annual Report for 1897, recommended the establishment of the school as a department of the Central High School. After considerable discussion this policy was adopted, and in September, 1898, the school began its work.

In 1898 there entered upon the course 174 students, and for the following year, although there was a falling off in the applications for admission into the higher schools, candidates for the School of Commerce slightly increased, the number admitted being 185. The following facts are furnished indicating somewhat of the clientele of this school.

Average age of students at admission: 1898, fifteen years, one and one half months; 1899, fifteen years, two months.

The persons to whom students are responsible are as follows:

	-			
			r898	1990
		·		
Fathers living		-	152	174
Widowed mothers			20	Q
Guardians -		•	2	2

The number of boys having widowed mothers is unusually large, indicating that boys look to this as a course of study that will equip them to care for themselves and for others.

Perhaps the most significant figures are those that show the occupations of the parents or guardians of the boys. These are as follows:

	1898	1899
Independent business (generally small tradespeople)	66	55
Clerks and salespeople	35	39
Skilled laborers	38	48
Fublic employés	7	7
Unskilled laborers	4	10
Professional		
Quasi professional (collectors, conveyancers, etc.)	2	5
Retired, or with no ascertainable occupation	22	151

The course of study with which the Philadelphia school was organized, was prepared by Superintendent Brooks, and approved by the Board of Public Education in July, 1898. This course was printed in the following autumn, and given a somewhat wide distribution. From the first the course was regarded as tentative and experimental; we do not feel that it has yet passed beyond that stage. Criticisms of the first course and suggestions for changes in it were invited from men representing various points of view." A year's experience, with helpful comment from many friends led to a revision of the course in June, 1800, and as it now stands it is presented in this account. For convenience in setting forth the subjects of study, and as a working basis for carrying the course into effect, it has been divided somewhat arbitrarily into seven parts, as follows: English language and literature, languages other than English, mathematics, history, scienceeconomics and politics, and business technique. A comprehensive statement of the course is given, showing the studies arranged by years and in subject groups.

*The Avenue Trudaine School of Paris, to which this corresponds somewhat in grade, furnished in 1893 the following as to the parentage of its pupils: Irades people, 156; employed in business houses and banks, 184; employed in public offices 80; liberal professions, 23; no occupation, 51; workmen, 14.—Paris Chamber of Commerce Report, p. 20.

*This was by letter and by personal solicitation. The course was embodied in the report of President Huev for 1898 with this statement: "A copy of this course is submitted with this report, and criticism thereon is invited." Annual Report, p. 14.

PHILADELPHIA CENTRAL HIGH SCHOOL -SCHOOL OF COMMERCE. COURSE OF STUDY.

Suajects or Stuby	FIRST VEAR	SECOND YEAR	THIRD YEAR	POURTH YEAR
1. English language and literature	Composition writing Maternal in classical literature in translation, and in American literature	History of English literature, with composition writing 3	Readings from English Illere- ture, with etacy writing s	Reviews Resdings and thesis weiting
II, Languages other than Engsish	Elements of Latin, with easy readings	German grammar - Reading and conversation 5	Gernan — Reading, composi- tion, conversation 3 Spanish (or French) 4	Gernan — Advanced reading, conversation, and correspond- ence Spanish (or French) 3
III. Mathematics	Elementary algebra s	Advanced commercial arritment (including menauration and the metric system) a Geometry and the elements of trigonometry		
IV. History	Greek and Roman history; European history to Soo A.D.	English and modera Estropeas history	American history s	Medern, industrial, and commet- cial history (United Scates, England, and Germany)
	Raw materials of commence-			

Several rather important considerations are involved in our brief experience. First, will a high school of commerce, with a four-year course, get and hold a body of students? If a two-year technical course is established, students will be forthcoming in numbers; but it is hardly the function of public education to give a technical preparation for a business career and no other education, as it is not its function to prepare for law, medicine, or theology. The most that commercial training, as a branch of public secondary education, can hope to do, is to give such an equipment as will fit boys to be intelligent apprentices. It can turn their attention to lines of study that will interest them in business, and it can give the knowledge that should precede the entrance upon business pursuits. This is, after all, an education of real worth along modern lines, dealing with some very general aspects of technical business work. Such a course, from its special nature, is likely to turn away those who look to the professions. Of the remainder who are to go into business, many would prefer a single year in a business college. Several of our students have been not a little disappointed at what they call the "too general character of our work," and some of them have withdrawn for attendance upon private business schools of the familiar type. Force of circumstances, too, has made it necessary for other students to withdraw, and they have taken positions as junior clerks, assistant book-keepers, and the like, in banks, insurance companies, stores, and industrial establishments. Of the 174 students who entered on the course in September, 1898, less than 100 are now pursuing work at the middle of the second year. The increased business activity of the past year has made an unprecedented demand for helpers, as shown in the withdrawal of the boys from the upper grades of grammar schools, as well as from various higher schools. Those of our boys who wished to secure positions seem to have had little difficulty in doing so. They came to us trained in the vertical system of penmanship, and in a single year have cultivated a legible, and in some cases a rapid handwriting that makes them useful in offices.

Our students show an earnestness in their studies, and devote themselves to mathematics, science, language (with the possible exception of the one year in Latin) and history, with a spirit that is gratifying. There is also much interest in the technical work, so much so, that it is as an organizing core which gives conscious purpose to the other subjects of study. The optional two hours a week in type-writing have been elected by practically all the students of the second

year, showing that in this work there is much interest, though already the interest is turned to good account, for students are preparing essays and other assigned work on their type-writers. We approach the end of the second and third years of the course with anticipation as to whether students will continue. One proposal at the time the curriculum was under discussion was that stenography and type-writing be given as subjects for the first year. I can but feel that this would have been unfortunate. Future experience must determine whether it may not be better to have these subjects, with book-keeping, placed in the third and fourth years, rather than in the second and third. As the course now stands, the subjects which are most promising as a preparation for those who have no desire to be other than detail clerks, are concluded at the end of the third year, while the work of the fourth year has a wider treatment of commercial and industrial affairs. Principal Mickleborough, of the Brooklyn High School for Boys, speaking from their experience, questions the wisdom of the arrangement of our course, and predicts that we shall have comparatively few students for the fourth year. Even though this be true, the present arrangement might be continued by granting a certificate to those who wish to withdraw at the successful completion of the third year, and a diploma to those who complete the fourth year. Such a policy might convert the fourth-year work into a post-graduate course, but opinions as to this are purely hypothetical.

The department was established in a most distinctive classical and scientific institution, rather against the best judgment of its president, and for its instruction it has been largely dependent upon the previously existing teaching force. It has, however, fairly sustained itself in its relations to other departments, and has been able to create a good deal of its peculiar educational atmosphere. The students of the Department of Commerce have developed a distinctive school feeling, and have organized their own clubs and separate class and school athletic teams; already the differentiation is sufficiently complete to warrant the calling of the experiment, a separate school. That the new departure has made so good a showing is due to the fair treatment it has had from President Robert Ellis Thompson, and to the intelligent comprehension of its aim and scope by my colleages in the faculty

ANALYSIS OF CONTENTS.

1

BUSINESS EDUCATION A DEMAND OF THE TIMES.

(1) The present interest in education and demand for a new element.
(2) Business education defined. (3) Three sorts of business schools needed.

(4) Principles to guide in the establishment of commercial education. (5) The elementary school and the continuation school. (6) Schools of commerce of the secondary grade. (7) Higher schools of commerce. (8) Schools of commerce will increase attendance at secondary and higher institutions. (9) Schools of commerce a present necessity.

H.

BUSINESS EDUCATION: ITS VALUE AND NECESSITY.

(1) Place and possibility of business education. (2) Need of a new estimate of the importance of trade and commerce. (3) Science of society, and need of economic leadership. (4) Advantages to business from better-trained men. (5) Education will give a new standard of business ethics, and will convert many failures into successes. (6) The value of special training is now recognized in all other lines of activity, and it is necessary as a preparation for business.

III.

RECENT FOREIGN EXPERIENCE IN THE TRAINING OF BUSINESS MEN.

- 1. A further treatment needed.
 - a) Commercial education in Great Britain.
 - (1) English education, classical and insular.
 - (2) Work of the London Board of Trade, etc.
 - (3) The English evening continuation-school scheme.
 - (4) Other measures proposed for commercial education.
 - b) Germany and Austria.
 - (1) Commercial education in Germany in relation to general education.
 - (2) Kinds of German commercial schools, and an account of the Kaufmannische Fortbildungsschule.

- (3) Middle schools of commerce.
- (4) The Leipzig Handelshochschule,
- (5) Demand for further commercial instruction in Germany
- (6) Commercial education in Austria.
- (7) Official curricula of the Austrian schools.
- c) France and Belgium.
 - (1) Way commercial schools regarded in France, and sorts of schools.
 - (2) Primary and intermediate commercial schools public and private.
 - (3) Schools under private control.
 - (4) The Paris Avenue Trudaine Commercial School.
 - (5) Superior schools of commerce in France.
 - (6) Recent commercial education in Belgium.

IV.

OBSTACLES TO THE INAUGURATION OF COMMERCIAL EDUCATION.

- 1. Seeming opposition to established education.
- 2. Lack of of organization, buildings, equipment, etc.
 - a) American and European methods contrasted.
 - b) Possible methods of inaugurating commercial education.
 - c) Advantages of private establishments for experimentation
 - d) Need of interesting merchants and tradesmen.
 - e) Safety in deferring to practical men.
 - f) Advantages of independent schools of commerce.
 - g) Need of the support of the business community.
 - A) Seeming barrier between the academic and the practical.
 - i) Schools of commerce to be up-to-date.
 - i) New sort of science equipment.
- 3. Supreme need is men as leaders and teachers.
- 4. Schools of commerce should be given equal recognition. Summary.

V.

SECONDARY SCHOOL OF COMMERCE IN PHILADELPHIA.

Educational character of the city; steps that led to the experiment described; clientele of the school; course of study; further considerations, holding students, etc.

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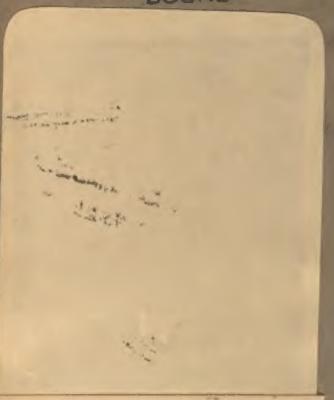
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